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This study was initiated to identify the transition plan requirements, from a user perspective, for moving from the existing hospital into the new medical facility at Madigan Army Medical Center. The benefits derived from the development of a working transition plan are twofold. First, a transition plan provides a framework by which to view and evaluate, on a broad scale, the transition process, and provides a structure by which transition requirements and implementation strategies can be achieved more effectively. Secondly, for those involved in the transition process, the transition planning process can serve as a focus for discussion, building consensus, altering organizational behaviors, and translating the transition effort into action. Discussion centered on how to implement such a plan and the major transition areas requiring extensive development. (continues)

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Top management must play an integral leadership role in the development and implementation of the planning document, outlining staff responsibilities as well as mandating that actions toward transition begin at all levels. Additionally, the study emphasized the need for the staff to take a proactive approach in meeting their section transition obligations. Wide dissemination of information to the staff in the form of construction progress briefings, published newsletters, and training is needed in order to build proprietorship and understanding of the new facility, its systems, and to create an environment and conditions conducive to accepting change and accomplishing section goals.

A STUDY TO DEVELOP  
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FOR THE OCCUPANCY OF THE  
NEW MADIGAN ARMY MEDICAL CENTER  
AT FORT LEWIS, WASHINGTON

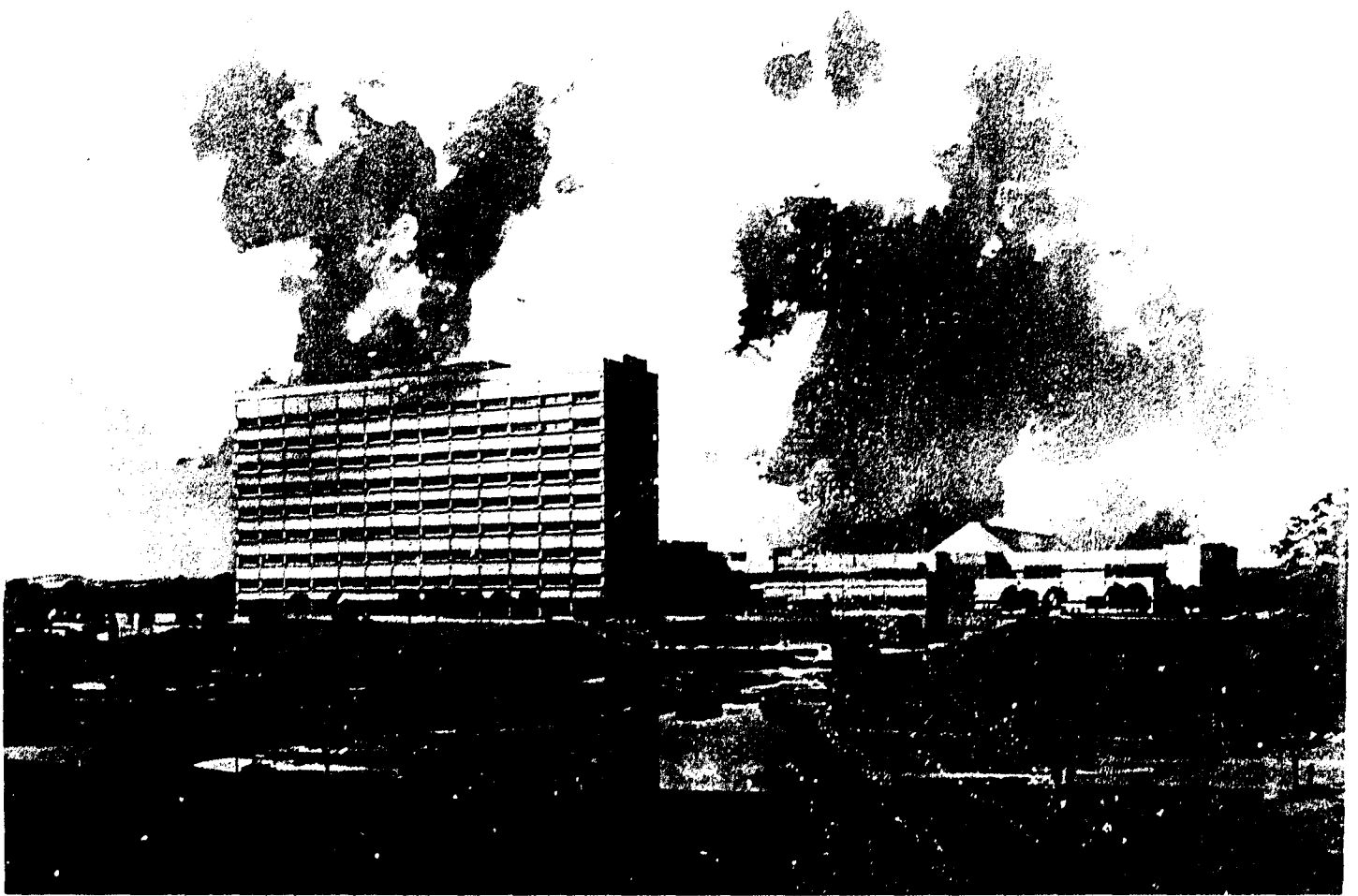
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Submitted to the Faculty of  
Baylor University  
In Partial Fulfillment of the  
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of  
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by

Major John P. Peterson, SP

August 1988





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## LIST OF ILLUSTRATIONS

FIG. 1 DESIGN CONCEPT

3

## I. INTRODUCTION

### General

Planning and managing a major construction project is a multi-faceted, inter-disciplinary task which requires a significant time commitment, attention to detail, and the integration of many complex elements (Rohde 1). Each hospital facility is unique and thus the plans and construction management are site specific despite the fact that all serve the same general functions, although to varying degrees.

There are many factors which must be considered when planning to move to a new hospital facility that replaces an existing facility in its entirety. Planning for that major change requires the employment of the fundamental concepts and principles of management: planning, organizing, staffing, directing, and controlling. The application of these principles can enable a highly complex institution to successfully move to a new facility.

Transition planning creates an organized framework for the move plan and allows administrators to scrutinize present operations and procedures and to conceptualize new facility functions within the context of its new systems. The time and effort spent in the early development of sound plans can prove to be a wise investment toward a highly successful final move.

### General Description of the Hospital

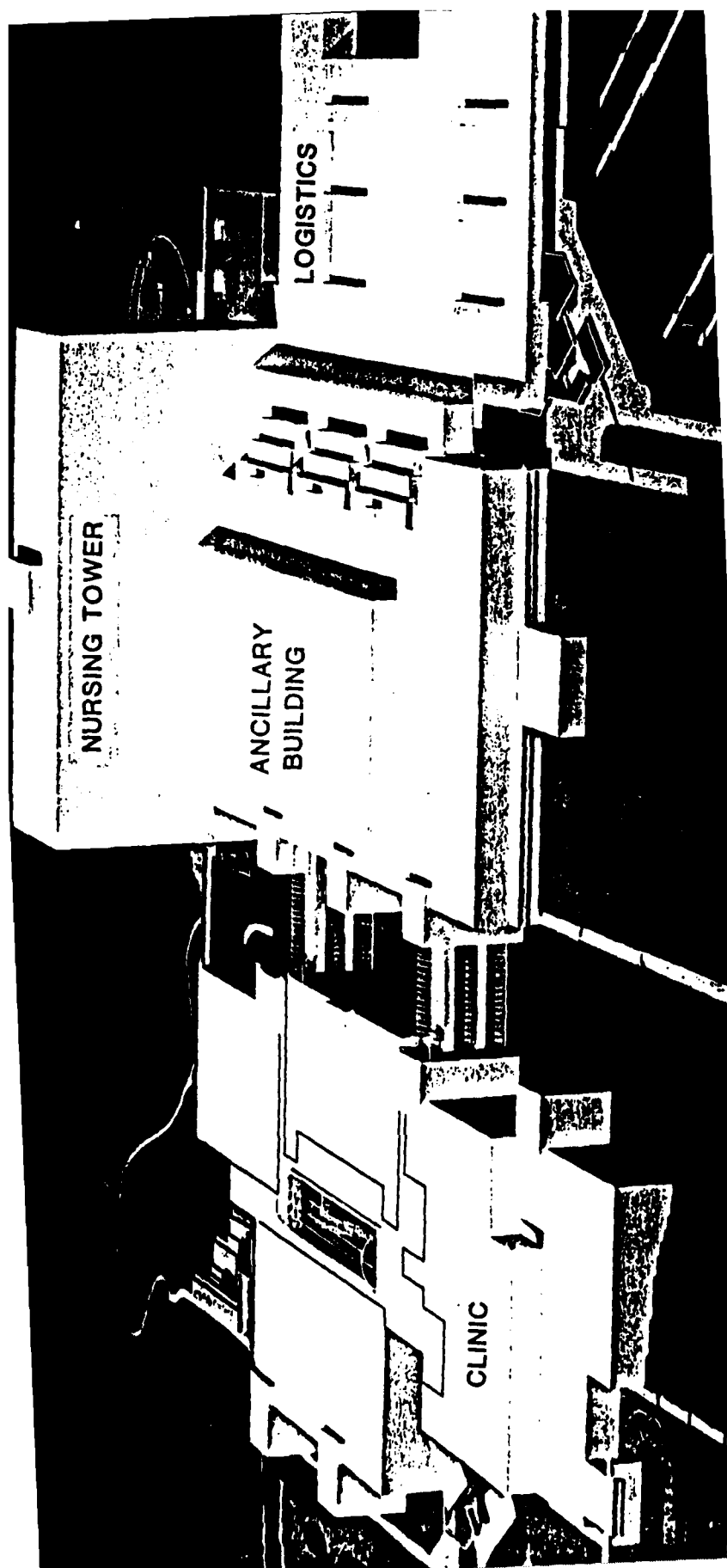
Madigan Army Medical Center was constructed as a Station Hospital at Fort Lewis, Washington in 1943. The cantonment hospital began treating patients in February 1944, and on 22 September 1944, was dedicated as Madigan General Hospital in honor of Colonel Patrick Madigan, a noted Army Neuropsychiatrist. Over the years the hospital has become inefficient and physically obsolete. Presently, patient care and teaching functions are conducted in a 101 building complex covering 75 acres.

To replace the antiquated facility a new construction project was initiated for Madigan Army Medical Center. The modernization program for this hospital facility was developed by the US Army Health Facility Planning Agency, representing the Office of the Surgeon General. The Department of the Army, Corps of Engineers operates as the Project Manager, while the Seattle District serves as the Contracting Officer for the final design and construction.

The design process began in September 1981 and was completed in September 1985. Late in the final design, Congress directed a scope reduction resulting in the removal of one nursing tower floor and the loss of 64 beds.

The replacement design consists of a 1.2 million square foot, 414 bed tertiary care teaching facility. The physical plant includes a nine story nursing tower, a three story outpatient clinic, a four story ancillary medical support structure, and a one story logistics building as presented in Fig. 1. The total capacity of the facility can be increased to





618 beds by the addition of another 204 mobilization beds in specially designed patient rooms (New MAMC Info Pamphlet 1-4). Services have been planned for approximately 29,500 active duty military, 53,000 military dependents, and 69,500 retirees and their dependents.

The contract for the new Madigan Army Medical Center was awarded on 30 June 1986 with a Current Working Estimate of \$278 million for the construction of the facility. Funds for the construction of this facility are appropriated on a fiscal year by year basis. According to the New Madigan Project Office (Sargent "Fact Sheet") the original projected funding requirements developed for budget purposes were:

FY 85:	\$12 million
FY 86:	\$26 million
FY 87:	\$72 million
FY 88:	\$90 million
FY 89:	\$80 million
FY 90:	<u>\$58 million</u>

TOTAL      \$338 million

Actual appropriations to date are:

FY 85:	\$11.2 million
FY 86:	\$24.9 million
FY 87:	\$72.1 million
FY 88:	<u>\$86 million</u>

TOTAL      \$194.2 million

The revised funding requirements for the remaining appropriations that have been developed by the Defense Medical Facility Office are:

FY 89:	\$59 million
FY 90:	<u>\$23.8 million</u>
TOTAL	\$82.8 million

Construction began on 22 July 1986, with a projected Beneficial Occupancy Date of 15 June 1991. With allowable time extensions, the medical center is expected to be operational approximately six months later (New MAMC Info Pamphlet 1-4).

### **Conditions That Prompted the Study**

The development of a transition plan for moving from an existing hospital facility to a new facility is used by management as one method of implementing action toward a final intended result. Planning in the early stages provides the basis upon which the transition project is formulated and develops the framework for the time and direction by which the facility is to move. Planning improves the decision-making process by providing a structure for concept development, by indicating areas where more information may be needed, and by sensitizing users to the scope and depth of detail that must be addressed. A detailed schedule prepares and involves the hospital staff for the relocation of patients and services in the new facility. In addition, careful planning is required in order to maintain hospital construction costs within established parameters, and to ensure that the existing facility will continue to provide quality services within budgetary and physical constraints. In short, a transition plan serves as an integrative, process oriented activity that keys upon timing, coordination and monitoring in order to achieve a successful goal: the occupancy and start-up of a new hospital facility.

One crucial element missing from the planning process has been the provision of adequate background information and education from a user perspective to allow the transition effort to be fully effective. Frequently transition efforts have centered on an isolated task orientation without staff having a full understanding of the purpose and impact of their input. An overview of the transition planning functions provides a reference point from which the user may begin planning his section's contribution to the overall transition.

#### **Problem Statement**

To develop the transition plan requirements for moving from the existing hospital into the new medical facility at Madigan Army Medical Center.

#### **Objectives**

The move from an existing into a newly constructed hospital involves more than just the transfer of patients, staff, and operations into the new facility. It offers the opportunity to provide medical services in an improved manner, and as such will necessarily confront many established methods of operation. In order to achieve a successful transition, which will meet the needs and expectations of patients, staff and the community, plans must address and ameliorate inherent resistance to change.

In order to develop a successful transition plan, the following objectives are identified.

1. Review the literature on hospital movement planning.

2. Review transition model plans developed by other recently constructed military hospital facilities.
3. Identify project activities.
  - a. Define the project tasks, for example:
    - (1.) Staff orientation and training;
    - (2.) Pre-move stocking of supplies;
    - (3.) Operational shakedown;
    - (4.) Review and update existing policies, procedures, and methods to ensure their appropriateness for the new operating environment;
    - (5.) Development of new operating procedures and systems.
  - b. Using program evaluation and review technique (PERT) and/or critical path method (CPM), establish the time relationships and events within the project (i.e. critical path network scheduling).
4. Determine which project activities are interdependent how it affects:
  - a. project duration,
  - b. facility readiness for occupancy,
  - c. equipment acquisition and installation,
  - d. operations preparedness (the capability of the new facility to sustain operations from movement day on), and

- e. move planning to ensure that both the existing and new facility can function at predetermined levels during the pre-move and immediate post-move periods.
- 5. Establish a method of gauging the readiness of the medical facility for occupancy as it applies to the transition plan activities.
- 6. Summarize the status of the project for the hospital administration so that they may review and provide input.
- 7. Have each department chief develop a concept of operations for the utilization of their new area.<sup>1</sup>
- 8. Formulate patient admitting and scheduling policies to establish desired inpatient and outpatient management levels for clinic services and wards through the pre-move activity, the patient move, and post-move activity.

### Criteria

In order for the developed transition plan to practically serve the needs of Madigan Army Medical Center, it must:

- 1. Follow program and strategic objectives established by the Command for the new facility.
- 2. Be acceptable to the designated hospital transition planning committee.

3. Provide for a close monitoring of the status of building inspections and their affect on the hospital's move schedule.
4. Provide the basis for a smooth and timely move as demonstrated by:
  - a. An accurate estimate of the move-in date within parameters to be established.
  - b. An accurate estimate of moving time within parameters to be established.
  - c. An accurate estimate of resource requirements, both manpower and equipment within parameters to be established.
  - d. An accurate estimate of budgetary requirements for the transition project.

#### **Assumptions**

The following constants have been established in this study:

1. The large workload generated by the technical inspection and installation of equipment will require additional civilian contract or military medical maintenance personnel and the allocation of additional budgetary resources.<sup>2</sup>
2. After the beneficial occupancy date the facility will undergo a provisioning phase which requires approximately six months.<sup>3</sup>
3. The facility will undergo a Phase III of construction to run concurrently with the provisioning phase, but

which could extend past the six-month provisioning phase. The majority of approved changes are carried out during the Phase III construction project.

### **Limitations**

The following relevant constraints have been noted for this study.

1. The limited availability of funds for contracted service (moving firms, housekeeping), overtime for staff personnel, and funding and time constraints for the orientation and training of staff for new facility operating requirements at the time of transition may alter the estimates or sequencing of planning or services described by the model.
2. A computer-assisted software tracking system such as Time-Line  $t_m$ , a critical path method program, is planned for use; however, due to hospital resource constraints of personnel and/or time to keep the system current, a manual system may have to be used.
3. The validity of some aspects of the model may be compromised by unanticipated variations in staffing or patient work load.<sup>4</sup>
4. Although provisioning/construction delays will exist, it may be necessary to include alternatives in a move plan to anticipate such contingencies.
5. Critical equipment not received or installed prior to the move date may be a cause for a move delay.<sup>5</sup> While



not a limiting factor in the development of a transition plan overall, such a limitation should be planned for at both the organizational and departmental level.

6. As the move process occurs, a number of services will be operating out of the old facility, while others are simultaneously operating from the new MAMC until the transition has been completed. Staffing and resource constraints will prevent the simultaneous operation of the two hospitals for an extended period.

### **Research Methodology**

The research methodology to be followed in this study will be described in three phases:

The first phase will consist of a review of the literature on the subject. The second phase, designed with the objective of obtaining site-specific information on present operations, will be to consult with the New Madigan Project Group, department chiefs, and staff personnel in order to obtain information on current operations and transition considerations. The third phase will lead to the development of a transition plan requirements package. Critical path scheduling is the primary tool used in transition planning.

A critical path network is established by first indicating the major milestones to be attained. The secondary or supporting activities are then added to the system. The interaction of each secondary activity is indicated with respect to the activities

that must precede it, follow it, and occur concurrently with it. Additionally, the system or network flowchart must also show the group of events that must have occurred before any activity can begin. Formulation of the system flowchart requires that the project's internal time dependencies be identified and recorded. These dependencies must be prominently identified from the outset to avoid them going unnoticed until a deadline slips by necessitating an adjustment at the expense of other crucial events. The time spent in developing a critical path schedule is valuable because the timing and coordination of events on paper helps reduce the opportunity for expensive emergencies.

In order to be an effective planning tool, the system flowchart should be developed before the actual project work begins with as much detail as possible. This graphic representation helps point out omissions, scheduling conflicts, and discrepancies which can be addressed and resolved before the work begins.

The flexibility inherent in the planning stage makes it feasible to rearrange the elements of the plan to optimize the critical path. Events are updated during the move to show progress and to determine the need, if any, for the reallocation of resources.

The use of the critical path network provides a detailed and systematic plan and time schedule before the move project begins. As more activities are completed, time schedules can be estimated more closely to provide increasingly accurate control over the remaining elements required for the move.

The activities and events necessary for facility readiness, operations preparedness, and move planning are formulated within the guidelines of the critical path network.

### **Literature Review**

The development and implementation of a successful transition plan must take into account two major concerns. The first is the completion of the transition plan itself. The development of a technical blueprint for operations must occur prior to moving from the existing hospital to a new facility. Such a written plan provides the systematic, procedural guidance by which to conduct the move.

Of the 800-1000 tasks identified in the articles reviewed on transition planning, the use of computer scheduling to identify tasks and the time relationships to accomplish those tasks, assign responsibilities, and allow for early revision of plans as need dictates, has become the norm. A second and more involved consideration, is the preparation and commitment of the staff to the organizational changes which are to occur. This second consideration is a very active process, one which is imperative in order to successfully set the transition plan into action.

This literature review will first describe the varied methodologies used by hospital facilities in developing their transition movement plan and movement procedures. Secondly, the review will focus on the change process that must be managed and incorporated into the transition plan if the pre-move, move, and post-move are to be successful.

### Transition Planning

A review of the literature reflects the varied ways in which specific sites have approached the formation of transition plans in the movement and relocation to a new or renovated hospital facility. This examination points to the fact that there can be many approaches by which to accomplish the same goals, varying only in the scope, complexity, and design of the plan. Common to each was the conceptualization of how work was to be performed, the practical implementation of those ideas and the management necessary to carry those ideas to fruition. Move planning provided the catalyst for a successful transition from the present way of doing things to the desired future state. The transition plan set the framework for those facilities to formulate and manage resources, strategies, and methods that would facilitate the change process.

In developing a transition plan for moving from two existing hospitals to a new facility, Copeland identified and described six major sections of their plan:

- (1) patient movement;
- (2) materiels and equipment;
- (3) operating procedures;
- (4) staffing;
- (5) community; and
- (6) department plans (21).

Each portion of the plan was assigned to a section chief whose responsibilities were to plan the concept of department

activities. Each area's activities were further coordinated through the Transition Committee. The Transition Committee was a matrix overlay of the functioning hospital organizational structure whose mission was to collect information, make assessments, and provide advice on recommended solutions to the president of the hospital. It was the Committee's responsibility to coordinate the activities of each section to ensure compatibility.

Successful section planning required interchange and cooperation among the various departments. To accomplish this end, section chiefs appointed and chaired working committees, assigned projects and integrated its group activities. When the approximate dates for each portion of the movement plan were set, a transition schedule was developed and distributed throughout the hospital. The schedule provided a set of benchmarks by which departments were able to chart their progress (Copeland 20).

Copeland goes on to describe specific issues requiring action such as equipment identification and movement, staffing requirements for the new facility, and a mock patient move to confirm the validity of their patient movement plan (22,23).

Loeb, in describing the planning, design and movement process into a new hospital pharmacy, detailed and discussed important activities which must precede and follow moving to a new facility. The planning concepts presented were applicable to hospital services and departments in general. Loeb stressed the importance of systems implementation prior to moving, and if possible, training to increase understanding and facilitate

communication and involvement of employees. In addition, this allowed the development of policies and procedures prior to the move, and improved the effectiveness and efficiency of the process after the move by resolving problems identified early-on. An added component of an effective movement plan included the incorporation of detailed contingency plans so that problems, as they developed, could be handled in a logical manner (447-449).

To address problems as they occurred, Copeland designated a Post Move Task Force to facilitate the exchange of information, identify possible solutions, and to enhance communication with employees. What were initially daily meetings became tri- and bi-weekly. Within six weeks meetings were held weekly, and soon after, normal organizational channels were used for problem resolution. The formation of the Task Force provided an open forum to relieve stress and met the staff need for rapid response to problems, thus making for a fully operative new facility (23).

Tampa General Hospital titled their operational planning process as Activation Planning, and established seven goals which served as departmental guidelines from which to stage their planning efforts. As stated, the following goals served as the general framework from which to begin their transitional effort:

- (1) to generate a team effort in developing the plan for a successful move;
- (2) to determine new facility procedures, identify inadequacies, or problem areas that must be addressed prior to new hospital occupancy;

- (3) to investigate and determine methods of reducing inessential costs associated with the move;
- (4) to develop an equipment acquisition program within specified budgetary limits;
- (5) to develop a move sequence schedule for each operational section to include assigning move responsibilities for employee orientation and training, hospital provisioning, and equipment configuration, installation, and calibration;
- (6) to facilitate the distribution of information among involved task forces as well as throughout the various organizational levels of the hospital; and
- (7) to make the physical transition into the hospital with as little interruption of patient care as possible (Walker 16-17).

To accomplish these ends, multidisciplinary task forces were delegated with the responsibility for specific areas, such as equipment planning and procurement, and reported to the Activation Committee. Twenty task forces were formed, each composed of department representatives having an operational interest. Outside assistance was provided by consultants who served in an advisory capacity to identify issues which required resolution prior to moving. One of the positive outgrowths of their multidisciplinary approach, other than the creative dynamics inherent in the group interaction process, was the fostering of pride and ownership of the new facility and a better understanding of overall hospital operations by the more than 250

hospital employees involved in the activation planning process (Walker 16-18).

Boucher and Hobbins described their Transition Committee as responsible for the design of a comprehensive strategic plan to ensure optimal communication and coordination. A second committee, the Patient Transfer Committee, which reported to the Transition Committee, was responsible for the planning and execution of the physical relocation of patients, furnishings and equipment. Planning began approximately two years prior to the move. Specific details of the physical and patient relocation process were addressed in the article (55-57).

In the initial transition planning process, the need for the early development of a detailed concept of operations at the department level was recognized by Mark and Rowe. The concept of operations assisted the Transition Committee and department heads in identifying the department's position within the hospital; operational responsibility of each area; their hours of operation; functional dependencies; space requirements; special needs within the work area; equipment requirements and location; patient, staff, and supply work flow and distribution; workload statistics; and staffing levels (Mark and Rowe 22).

Loeb noted an additional benefit of developing a detailed concept of operations was that a written plan was on file in case of personnel turnover. As the work progressed and the move became more imminent, the documentation of policies and procedures, systems, move-related committees, training and



general information, and updated concepts of operations took on increased importance (Loeb 444).

Kuntz characterized the actual patient move as anticlimactic compared to the intense planning effort required in setting up the new facility, the physical transfer of patients while both hospitals were operational, and the eventual close down of the old facility. Although planning for movement into the new facility began nine months in advance; in retrospect, Kuntz recommended a 12 to 18 month lead time prior to the actual move date. While a late start didn't effect their move, important preparations and steps such as testing new systems and procedures, training and orienting staff to the new facility, improving operations, prestocking supplies and purging records may have been compromised. A lack of preparation could lead to increasing the stress level associated with the move and could ultimately force the move to be delayed so as not to compromise patient safety. Contingency plans and back-up systems already in place may be dropped or forgotten in the rush to resolve crises (70).

Kuntz recommended separating the patient move from all other details involved in transition planning. In order to safely and efficiently manage patient movement into the new facility, a Patient Transfer Committee chaired by a physician to manage the transfer of patients was established and, in turn, reported to the Hospital Transition Coordination Committee. The Transition Coordination Committee convened biweekly until three months before the move, at which time, weekly meetings were instituted.

Two weeks prior to the move daily meetings were indicated and proved instrumental in resolving issues (70).

In preparing for transition to a new facility, Hughes identified four prime areas: medical/nursing considerations; patient transfer; physical relocation; and planning for staffing levels. He specifically addressed the manpower planning program and the process by which to determine the exact number and type of jobs required. He estimated that 90% of the jobs in the new hospital would be modified to some extent with 20% being completely altered. Management felt it was essential to have the reclassification of jobs "reflect the employees' point of view rather than be the end result of a production-line approach to staffing." Key to identifying staffing requirements was the recognition that not only would job procedures change, but the responsibilities and functions of the departments would also be modified. The alignment of staffing needs for the new facility, therefore, required a complete assessment of their present organizational structure and mission objectives, and the implementation of their staffing strategies prior to the move into their new facility (28,29).

Hanlon discussed a two-phase strategy in moving to a new hospital facility. Using the critical path scheduling technique, the hospital conducted a separate but concurrent move of emergency services (emergency, surgery, recovery, intensive care units) with the rest of the hospital's services. In evaluating different plans for the two phases of the move, factors, such as differences in the layout and design between the facilities, ease

of access to the new hospital, travel time between the two, availability of funds and personnel resources (commercial movers, volunteers), and a gradual versus a quick move, were considered. Once a plan was approved, a departmental planning guide which indicated time sequences, procedures for moving, and methods of handling sensitive items were developed and distributed (69,70).

Hanlon offered considerable personal insight into the problems associated with inventory review and purchasing, the installation and switch-over of communications equipment from the old to the new facility, the problems inherent in the design and implementation of an effective staff training and orientation program, and the overextension of staffing resources to support both the old and the new facility during the move (70). He recommended the establishment of a full-time project team responsible for the broad functional requirements of the transition move whose issues cross over organizational boundaries. Hanlon found that numerous preparatory tasks, which were department specific or required minimal interdepartmental coordination, were best accomplished by assigning them to the department as an additional duty. He noted that the successful execution of the transition plan was a measure of the organization's ability to balance the broad functional responsibilities of the move with the individual interests and concerns of the staff (Hanlon 72).

Though published in 1972, Hanson's article is a classic one whose guiding principles embody the major considerations for the formulation of a transition movement plan. The use of critical

path scheduling as the coordinating tool served as the framework from which the transition plan was based and developed. Data processing output, to include activity lists, bar charts, and department and equipment movement schedules, were meticulously developed, resulting from the compilation of the myriad of details identified through discussions with the individual hospital departments. Once these plans were confirmed and finalized with the departments, they served as the movement control documents.

Hanson's article further detailed the planning procedures and special considerations involved in the transition move. Discussions centered on the extensive amount of coordination that was required for the transition move to include both within hospital preparations and external efforts to involving key individuals, private firms, and community resources such as police agencies, area hospitals, the Army, and an Air Force Reserve Unit.

The transition move plan for Vanderbilt University Hospital necessitated the establishment of a Transition Coordinating Team composed of key administrative personnel, and the designation of a full-time individual responsible for the transition. The departments were heavily involved in the transition planning and, with the aid of a consultant, identified over 900 tasks which fell into one of three functional categories: the readiness of the facility for occupancy, the preparedness of the staff to conduct operations in the new facility, or preparing for the move itself. Each of those tasks was provided a unique identifier and

placed on a time line for completion. Periodic progress checks were made to assess the progress in the completion of the tasks (Handel 62).

In their discussion of the transition, Handel, Hilling and Lingo stress the importance of assuring that personnel are trained to master the differing operational procedures/equipment they will encounter in the new facility. Along with the training, they stressed the need for contingency plans to back-up both new procedures and new equipment should there be problems. To anticipate general information problems, they developed a guide to the new hospital which gave general operating procedures about each department or service, provided a description of the facility with a floor plan, outlined general hospital policies, explained the hospital's new systems, and provided safety and emergency information. Each supervisor, service, and nursing unit was provided with a copy (63,64).

The plan for the move consisted of a departmental plan and a patient plan. After contracting for move personnel, the departments, in general, handled the planning for their own move. The patient move was under the direction of a designated physician who coordinated with the attending physicians and other support personnel. The steps in planning the patient transfer consisted of: identifying the personnel who would assist in the actual move of the patients; providing services for emergencies during the move; preparation and completion of necessary move forms and documents; provision of back-up services to make the move run smoothly; and conducting a practice move to develop

realistic estimates of time involved and types of problems that may be encountered (65,66).

Vanderbilt's transition involved the staff in planning for the move itself as well as for future operations, thus generating enthusiasm and a sense of belonging to the project. The community was involved when the hospital provided tours of the new facility, including areas that would later become inaccessible to the public (66).

Developed as an official document of the Health Facility Planning Agency, the Health Facility Project Officer's Guide is a detailed reference by which to conduct new construction or renovation project operations. It provides comprehensive guidance and direction for executing a successful transition move. The planning guide identifies eight general areas to be considered in most facility transition and occupancy plans. The eight areas listed and discussed were:

- (a) arrangements for medical services during the transfer;
- (b) transfer of equipment and materials;
- (c) plans for patient transfer;
- (d) assuring that routes to the new facility are regulated during the transfer;
- (e) provision of physical security for both facilities;
- (f) food services support;
- (g) staff inservice and orientation; and
- (h) military and civilian community relations (26-29).

Also included in the manual is a checklist itemizing specific considerations for movement and transition into the new facility (Health Facility Project Officer Guide Appendix C).

The after-action reports of military hospital facilities which have undergone major renovation or new facility construction indicate that planning and beginning transition tasks cannot start too early, and secondly, the early commitment of the staff and personnel involved with the transition is essential. Although the transition plans and after-action reports varied as to specifics, most problems noted directly stemmed from a failure to accomplish either one or both of these functions. Of the two areas, staff resistance was the most difficult obstacle to overcome especially in cases where personnel had not been included as part of the planning process from the outset.

### Change Process

A successful transition planning process cannot ignore the most basic element of transition--change. Beckhard and Harris present a model by which to fill the gap between the pre-change state (present) and the post-change state (future.) They identify six aspects in the change process:

- (1) Examine the current situation, to include the necessity for change;
- (2) Establish goals and determine the desired state or situation after the change;

- (3) Specify the limits of the transition state between the current condition and the desired future;
  - (4) Formulate the methodology by which the transition will be managed;
  - (5) Evaluate the change process; and
  - (6) Allow the new condition to reach equilibrium, and establish a balance that still permits flexibility
- (16).

As the demands for personal time and energy expands, it becomes the responsibility of top management to create the environment and conditions which will allow its personnel to cope and for the organization to move forward (Beckhard 5). Viewing the organization as a complex set of interdependent subsystems--people, structures, technology, tasks--which need to develop and maintain compatibility--a transition model provides the management structure and the forum for the dramatic changes which must take place in order to implement those changes. Within the transitional change framework, it is imperative that top management communicate the importance of the transition plan.

In order for a transition model to realize its potential, it must be dynamic and flexible, advocating an active position of personal involvement and follow-up. Transition should be incorporated as an integral part of the primary work of the people concerned and their commitment and involvement to that end. Inherent in this, is the requirement for thorough planning and refined strategies involving an analysis of options and outcomes, expenditures of time and money, well thought out



alternatives on how to administer the program, and decisions on how to control and follow-up on the program's development. Essential to the transition program's implementation and effectiveness is the commitment of the people to take ownership and manage the change so that the organization may grow (Beckhard 14, 15).

The systematic planning and organizing for the process of transitional change is the key prerequisite for the optimal management of the transition. In assessing the management structure and process in transitional change, Beckhard and Harris considered three major concepts. The first requirement was to establish the management structure by which to coordinate the change. The second is the development of an action plan, identifying those tasks, resources and actions necessary to effect the change and third, a commitment plan which names the key individuals whose commitment is necessary for the change to occur. Once committed, the transition to the changed state can proceed, encountering less resistance and minimizing the trauma associated with change. The authors further outline specific mechanisms by which to accomplish each of these concepts (45-57).

Huse addresses three major approaches to managed change:

- (1) intervention theory and method;
- (2) planned change; and
- (3) action research (89).

Of these three approaches, planned change and action research are the most applicable to the incorporation of the change process in a hospital transition model.

Described as a seven step process, planned change assumes that the necessary data by which to effect change is inherent within the organization and can be channeled toward corrective action which, in turn, provides additional data for further action (Huse 95-102). The focus of the planned change model is to develop concise solutions to address specific problems.

Similar to the planned change model, the seven step action research model focuses on the process of change; collecting data, analyzing the results, and formulating a plan for further action. This model involves a cyclical, iterative process in that, as data is gathered and actions are taken in response, further facts are generated which may be used to rediagnose and redesign new actions (Huse 103-109).

Huse presents three categories of principles of change:

- (1) Factors increasing resistance to change;
- (2) Consequences of resistance to change; and
- (3) Factors decreasing resistance to change (110).

Huse, in his discussion of the elements that contribute to resistance to change, presented several of his assumptions about resistance. He indicated that change appears to be accepted more readily by both supervisors and staff if it is requested by them and is not seen as threatening to either job security or to their personal status or authority. Small changes are better received than are large ones, as fewer people are affected by the change in dynamics of the situation. Unrequested change, which affects an entire work group, will likely meet resistance that is greater because of the magnifying effect of group behavior (110, 111).

The reaction to unrequested change will vary according to the degree of resistance and can take the form of either outright or unexpressed resistance, in which the employee's faith in the organization is undermined. Either of these forms can occur immediately or be delayed only to resurface later as an overt act of resistance or opposition. In some cases the resistance to change never becomes obvious and can never be directly associated with the change, but is manifested by decreased productivity, job satisfaction, or job interest (Huse 112,113).

In reducing opposition to change, Huse indicates that the affected individuals must see some personal benefit in the change before they are willing to become involved in the process. If membership in a group is desirable, offering security and other personal needs, members will be more amenable to change. Additionally, if a strong sense of group identification is in place, the individuals receiving the change will be more receptive of the change introduced by the influencing members of the group. The same is true if the change is advocated by a person in power, whether a formal or informal leader. Groups become more receptive to change if new or decisive factors in favor of change are presented, or if they themselves generate information which indicates a need for change. To introduce change effectively, the group must gain a feeling of ownership, first by a conscientious effort at opening communications, and further by involving them in the planning and execution of the change process (Huse 113-115).

Anecdotal experiences in the literature concerning transition point to the need to demystify the movement process in order to alleviate stress and apprehension, and to minimize employee resistance to change. The process should be easily understood by personnel at all levels of the organization. This state can be best achieved through early staff involvement, and orientation and training programs prior to the transition.

Hanlon noted that while training was a key factor toward helping employees to overcome their anxieties, a second consideration, supervisory leadership, proved to be the more important. He observed that when supervisors exercised their leadership role, operations tended to run much more smoothly as measured by the fewer number of problems which arose despite training efforts (71).

Bunning reported that their orientation program focused on dealing with employee apprehension. Training programs were designed to provide information, to establish new skills, to bolster confidence, and to lessen the employees fear of making errors. In planning the change process, efforts were made to familiarize the staff with their new work areas and the spatial relationships in the new facility. The apprehension of working in an unfamiliar environment, with new department and interpersonal relationships required adjustment by the staff (26).

Lloyd used employee tours to reduce anxiety about new work areas, to identify what activities would later cause employee apprehension, to familiarize employees with the new facility, and

to begin involving them in the change process, by eliciting suggestions for new methods of operation (62). Saunders also reported using employee tours in much the same way (82). Hanlon generated a feeling of ownership by providing an open-house for the staff and their families, and also used the opportunity to market the new facility by inviting the press and the public (72).

Several authors reported using newsletters about the progress of the new construction to boost employee interest, to explain new equipment systems, and to keep lines of communication open (Kuntz 72, Bunning 27, Evans Army Hospital Annex B). Copeland reported the development of a manager's transition report published monthly to furnish hospital construction status information. The report was then rewritten at the department level using a standardized format to disseminate pertinent information to the staff (21).

Bunning identified the needs for orientation by forming an employee advisory group which assessed what employees wanted to know about the facility, and how the information should be presented. Orientation information was published in a variety of media including a feature in the weekly hospital newspaper, a monthly construction and move planning newsletter, poster campaigns, a general information/physical orientation booklet, educational posters, maps of the various departments, and tours (27). Training was keyed to both hospital-wide systems as well as training for individuals in specialized areas. At the physician/managerial level, every opportunity was used as a means

by which to familiarize these hard-to-reach individuals with the new environment. For example, tours were provided upon request, luncheon/training/tour sessions were held in the new departments, and posters were set-up in physician lounges to explain new equipment and procedures (28,29).

Loeb found that running simulations of new systems helped alleviate staff anxiety as well as helping them see problem areas, estimate time dependencies, and develop the background to create realistic operating policies for the new environment (452).

Boucher and Hobbins noted that move orientation should include not only the staff but also the patients. They provided information on the new facility to patients and family as well as working up a system to provide communication support for patients and to allow them as much involvement in the move process as feasible (57).

As noted, the two principle interventions applied in ameliorating the stress of change are involving personnel in the change and keeping lines of communication open. The literature indicates that the early involvement of employees during the process fosters a sense of ownership, a greater understanding of the new facility as concepts of operation are developed, and enhances morale by instilling a positive attitude about their position in the new facility. Employees, when encouraged to participate, bring their background knowledge of the job and can frequently contribute innovative solutions to seemingly complex problems. On the whole, the more employees are kept abreast of

change and encouraged to participate in the change process, the greater the individual's self-esteem, and the more smooth and effective the implementation of that change becomes. By involving staff in the transition process, the frustration and skepticism generated by delays in occupancy can be lessened by having given them an understanding of the complicated nature of the move process. The development of a change climate is especially important to encourage staff members to look at new systems in ways other than them trying to recreate the old environment and job structure in the new situation (Loeb 444 & 447, Walker 17, Smith 69).

McGill and Kelly solicited input from the staff as to their thoughts on the benefits and optimal management of communications during the transition period. The authors reported that the staff throughout the hospital organization acknowledged the necessity and benefits of open communication. A communication facilitator was hired for the transition period to include six months post-move. The facilitator worked under the assumptions that: an effective communication system could help reduce anxiety and encourage creativity, aid people in understanding differing viewpoints, effective communications often involved developing interpersonal relationships and good listening skills, as well as generating trust and credibility as the foundation for effective communication. The facilitator was the access point for the staff, and provided direct personal contact with individuals and groups, often helping them work through communication problems. Additionally, the individual used varied media approaches in

order to keep communications current. This included such diverse activities as maintaining current telephone, mailing, and committee lists for the transition (28, 29).

Loeb found that reporting information and decisions as soon as they were finalized by management made for more effective communication. He felt that providing current information as it became available helped maintain staff interest as well as providing the time necessary for internalization of new information. The spread of rumors was held to a minimum by consistently providing reliable information (451).



### Endnotes

<sup>1</sup> A concept of operations defines the area of operations, specifies how business is to be conducted, and identifies other areas that are impacted. It answers the questions who, what, when, where, why, and how every action is made. This technique is critical to the maintenance of historical continuity because, frequently, personnel turnover may call into question the logic and validity of previous decisions.

<sup>2</sup> At this point the decision has not been made as to whether the number of military biomedical personnel will be increased or civilian contractors hired to support the staffing requirement for equipment installation (Fletcher, 29 April 1987).

<sup>3</sup> The Provisioning Phase is the time used to install equipment and supplies before the hospital becomes operational.

<sup>4</sup> Since the transition model is forecasting an event projected to occur in 1991, such a contingency as two wards being combined that had previously operated separately, is a realistic situation to anticipate.

<sup>5</sup> Invariably some hospital procured equipment will not have been received or installed at the time set for the move into the new facility. Should a piece of equipment not received be critical to the operation of the service involved, a command decision will have to be made as to whether or not to take the equipment from the existing facility to the new, or to delay the move and continue to operate within the existing facility until the new equipment is received and operational.

## II. DISCUSSION

To date, as noted in the Literature Review, hospital transition plans have focused primarily on detailing specific areas and tasks identified for movement to a new or renovated hospital facility. By using information provided in the literature, the perceptive transition coordinator is able to make an assessment of what aspects of a transition plan are germane to their situation and to develop a listing of specific requirements that must be accomplished prior to transition. Much less attention has been placed on conceptualizing the process and in describing the transition planning model and techniques and how they can be applied to establish and successfully set the transition plan into action. The integration of the hospital strategic plan with the transition planning process, coupled with an action oriented implementation strategy, can better enable the hospital to carryout a meaningful transition effort.

The single most important key to a successful transition move, identified in after-action reports of transition and movement plans, was the need for advance planning. Experience dictates that one of the first obstacles to overcome in establishing and implementing a transition plan is the staff mind set that views advance planning as being an unnecessary and academic process. In order to establish a strategic organizational policy, management must be able to market the importance of advance planning through their active participation and involvement in the development of the transition plan at all

staff levels. This process will build consensus and ownership and create the dynamic requirement to make it a viable document that will guide the transition effort of the hospital.

The hospital strategic plan should be the driving force in the development of the hospital transition plan. Well developed as a concept, strategic planning is the process that directs an organization's attention to the future, enabling it to adapt more readily to change and to determine the direction in which an organization chooses to move. By its very nature strategic planning is an umbrella activity that sets the tone and direction for the various other planning efforts within the organization.

Strategic planning is not new in the military hospital environment. Moving from a management by objectives approach to comprehensive budgeting, the U.S. Army Health Services Command (HSC) has sought to utilize the HSC Strategic Plan to drive the acquisition and management of resources through the development of mission directed priorities and link planning and programming to the Planning, Programming, Budgeting, and Execution (PPBE) system. Strategic planning thus provides a method by which to integrate the organizations needs within resource constraints. HSC subordinate activities have been directed to interface with the HSC Strategic Plan in the development of their own strategic plans.

Not having a strategic plan in effect, the extensive managerial and policy changes being initiated as a consequence of new hospital construction would suggest that the development of a strategic plan should be a high priority for Madigan Army Medical

Center (MAMC). The initiation of a strategic planning process would assist the hospital in taking the appropriate steps toward better defining the transition effort in relation to its current and future mission, organizational structure, goals, objectives, and short, intermediate and long-term strategies. By integrating the strategic plan with the transition plan, the framework by which managerial actions and organizational perspectives can be taken is in place. The use of written goals and objectives will allow for programs to be refined or expanded and plans for new programs to be developed. The strategic plan will further serve as the direction for discussion and evaluation and as a focal point for transition efforts and actions at the operational level.

When integrating the strategic plan to facility design and transition, it is necessary not only to include present requirements into the design but to also consider new and enlarged mission responsibilities and treatment modes which could require additional space and equipment. The end consequence of failing to plan ahead is the use of bed capacity space to accommodate academic, patient clinic, and support services. Without appropriate planning, what was originally designed as a 414-bed tertiary care teaching facility at MAMC can rapidly be reduced to a fraction of its stated bed capacity as space becomes more and more a premium. Later construction modifications and requirements for additional expansion of facilities will cost many times what it would have cost to provide the space in the original project should future considerations not be anticipated.

### Transition Plan

The development of a working transition plan provides a useful way of viewing and evaluating, on a broad scale, the transition process, and provides a structure by which transition requirements and implementation strategies can be achieved more effectively. Those involved in the transition process can use the plan as a focus for discussion, building consensus, altering organizational behaviors, and translating the transition effort into action.

Using the framework of the strategic planning process developed by Peters, (mission, strategy, plans, resulting actions, and desired actions), transition planning seeks to optimize those short and long-term decisions which contribute to building organizational understanding, consensus, and a smooth transition effort (A Strategic Planning Process 25). In order to achieve this end result, the process must be top management driven, beginning with the development of mission statements from each department and service of the new facility indicating the function and services to be delivered. The mission statements should be broad enough to accommodate environmental change and organizational development as the old hospital begins the transition process. Much more narrowly defined are the goals which translate the mission statements into more specific actions in preparation for transition. Goals must be communicated clearly to the members of the organization and the members committed to their attainment.

Within the organization will be a vast array of individual capabilities: from those who possess the knowledge and skills necessary to work through the transition process to those requiring educational programs to prepare them for their participation. It should not be taken for granted that having worked in a department or service automatically provides one with both the technical and interpersonal knowledge and skills necessary to meet the transition needs of the organization. An assessment of training requirements to help individuals move into the transition process, to include such fundamental topics such as reading blueprints, writing, and communication skills will greatly assist in the behavioral change process and place into focus the seriousness of the organization's development effort in support of transition.

As important as the working knowledge and skills to execute programs are the resources necessary to implement them. Goal related programs must be clearly defined and specific as to their resource demands. A competent and hard-working staff can do much to overcome resource limitations but cannot overcome basic deficiencies.

Prior to beginning the transition, clarification of responsibilities in the organization and appropriate coordinating mechanisms must be determined. The structure by which the transition effort is to be planned and executed must be in place, with communication lines established, in order for individuals to receive information they need to participate in program execution.

Each of the above concerns must be addressed during the pre-beneficial occupancy phase of the transition process. The transition areas requiring extensive review include: operational structure, design, equipment, supplies, manpower, training, and operating procedures and regulations. Each of these areas will be discussed.

### Structure

In order to accomplish the work required prior to transition, the structure by which to facilitate its execution must be in place. The organizational framework and the establishment of clear reporting relationships for each of the staff elements associated with the construction project have been well defined in the Madigan Army Medical Center Construction Management Plan. What is less well defined is the structure necessary to implement the transition plan at the Madigan user level.

Madigan, as with any large organization, is comprised of vertical and horizontal relationships of increasing complexity. Transition efforts must revolve around the clarification and coordination of these roles and relating them to one another. The establishment of a MAMC Transition Taskforce to address each of the elements of transition and act as a steering committee for the design of a comprehensive transition strategic plan is needed.

The taskforce would serve as a formal body for information sharing, the evaluation of plans, and provide feedback to the

extent necessary for goal development and program execution. The approach of the taskforce would be to listen to the concerns of those directly affected by the transition and allow them to identify their individual section needs within the context of the requirements for the entire facility. Composed of the various section transition coordinators, the taskforce would take on the responsibility of acting as a facilitator, with the MAMC Transition Coordinator heading the committee. The taskforce would report directly to the New Hospital Project Group (Appendix A).

In addition to its primary function of providing the managerial leadership necessary for the hospital's transition, the taskforce would have the responsibility of establishing necessary communication channels, building consensus, assessing needs and wants, and facilitating horizontal integration of the transition plan (Appendix B). The Transition Coordinator would task responsibilities for goal completion and act as a liaison between the MEDCEN and the New Madigan Project Office for such items as equipment review and selection. In order to best interface with the hospital and the New Madigan Project Office, the Transition Coordinator would require office space at both the New Madigan Project Office and the MEDCEN.

Mandatory meetings of the MAMC Transition Taskforce should begin when the Transition Coordinator assumes responsibility. It would be the duty of each of the section transition representatives to report back to their areas. Minutes of the Transition Taskforce and the New Madigan Project Group should be



distributed to each of the department/section chiefs to further serve as a method for disseminating information.

A monthly newsletter by the MAMC Transition Taskforce should be published as a general information vehicle in order to keep staff informed of the progress of the facility, to introduce new systems that will be functioning in the hospital, as well as giving notice of impending section taskings as a part of the Transition plan. The newsletter could present guest writers discussing operations and features of the various departments within the new facility. This type of publication would generate excitement and expectation within the staff and ease the anxiety about the changes coming with the new facility.

Perhaps the major responsibility of the Transition Coordinator would be to establish critical path networks of the transition milestones and of the time relationships and events necessary for the sections to accomplish them. Presently, the role and mission of the Transition Coordinator is being defined so that clear lines of authority and job responsibilities are outlined.

### **Design Review**

Design review, the detailed examination of blueprints for functional and operational utility, is the most critical task the new facility can perform, yet the abstract and remote nature of this added responsibility causes it to be given little of the priority and detailed attention it deserves. During design review most changes and modifications can be made at little or no

expense. At this time the personal involvement, commitment, and ownership of the new facility project by the staff can occur. The biggest hurdle to surmount is user inertia, in part, attributable to time constraints, anxiety, apprehension and lack of skill development prior to starting the design review process. Training programs to provide information, to establish new skills, and to bolster confidence will assist in alleviating these employee fears. Supervisory leadership must place emphasis on department staff involvement. The fact that few, if any, of the staff reviewing the plans will work in the new facility is a situation that can easily cause the design review to be consigned to a superficial examination which exposes only blatant flaws and major functional discrepancies.

Staff understanding and involvement is crucial to accomplishing a well conducted design review. The development and presentation of a project briefing packet, to include an overview of the project scope, design concept, special features and physical characteristics of the new facility, distribution systems, together with the facility floor plans, and a project summary schedule, provides notice to staff of the commencement of user involvement in the transition planning process (Appendix C). Users should be tasked to analyze the plans and specifications as if the project were to be completed during their tour of duty. This necessitates a personal commitment to providing the optimal facility for the hospital beneficiaries and staff.

Each section must develop a concept of operations which defines their mission, specifying how business is to be

conducted, and identifying concerns which would impact on their operations (Appendix D). By necessity, this conceptual process will help to overcome viewing section requirements from a limited internal perspective to one deserving multidisciplinary treatment. By the same token, staff must understand that the design concept may change the entire method by which operations within their areas are conducted and they must be flexible and prepared to relinquish unsuitable operational procedures. It is essential that the user develop their concept of operations within the context of the design intent of their area in the new facility and compare it to the manner in which operations are presently conducted (Appendix E). This time consuming, involved process will serve to raise questions, clarify operations, and build consensus between the New Madigan Project Office, the architects/engineers, the contractor, and the user section.

By performing mock walk-throughs of patient and staff work flow, confirming equipment placement and utilities, developing standard operating procedures, and having the design reviewed and re-reviewed by the resident experts in each functional area, many of the expensive engineering change proposals and problems which surface at the time of beneficial occupancy can be minimized. As each section begins working on design review, their findings should be integrated at the Transition Taskforce level to be evaluated and incorporated in upcoming design review iterations. This process of repeated review through all design phases should involve checking that changes submitted previously have been incorporated into the current design, and that those changes do

not, in turn, create other problems in design or function. Further, each review should be critically analyzed in order to uncover design discrepancies which might have been overlooked previously. As personnel and operational concepts change, the plans should be modified accordingly with appropriate engineer change proposals submitted. By beginning with this formalized process and documented updates, the individual with the actual responsibility for the move will have the background information and full knowledge of the reasoning behind each modification, change in equipment, or spatial and functional requirement.

A broad perspective of health care trends in both the civilian and the military community and their impact on facility design should also be considered in the design review process. The current expansion in ambulatory care brought on by cost constraints as well as advances in medical technology points to the need for a flexibility in design that can accommodate socio-political trends and maintain the attractiveness and usefulness of the facility during its projected life cycle. The integration of the hospital strategic plan in the design and review process of the facility can better assess and specify the construction needs to meet future mission service requirements.

### **Equipment**

Approximately 75 million dollars of equipment will be purchased for the new facility. Of monumental concern during the early stages of the transition is the selection, justification, and procurement of medical and non-medical equipment. This task

must begin at the time of design review and the development of a concept of operations. MAMC began the planning process early-on, identifying and consolidating equipment requirements through the Equipment Requirements Planning Guide (Appendix F) and publishing and providing inservice training on the Equipment Acquisition Program Memorandum (Appendix G) detailing the procurement process and the established milestones the functional activities must meet for the timely acquisition of equipment. Delays were anticipated and have been experienced, with the reconciliation of the current equipment hand receipts and new equipment lists extended from May 1988 to September 1988. The review of the reconciled equipment lists with their space and utility requirements have been rescheduled to accommodate the time intensive completion of each of the functional activity AutoCad drawings.<sup>1</sup> Further possible delays in equipment selection and acquisition which must be overcome include user indifference early in the project; changes made in equipment selection as new personnel are assigned; overextending the Logistics Division staff with responsibilities for both the old and new hospitals; the inundation of the MAMC and Post Purchasing and Contracting Office with purchase requests; and inadequate follow-up by all activities.

As can be expected, there are inherent difficulties in the equipment procurement process which regularly occur. Some of the more notable are postponements in equipment selection to obtain the most current models; failure to adequately justify sole-source equipment requests; the delays associated with processing

paperwork in Purchasing and Contracting; challenges to specification and contract awards; rewrites of solicitation; lengthy lead times for manufacturers to make delivery; and situations where equipment does not operate when installed or requires extensive assembly and testing prior to operation. Delays of this nature contribute to an equipment selection, procurement, and installation process that requires years rather than months to complete.

To facilitate the control and procurement of new hospital equipment, additional personnel requirements for transition should be allocated above the current authorized strength for the Logistics Division and the Purchasing and Contracting Branch. Transition personnel requirements have been identified and are included in Appendix H. These personnel should be hired as a part of the transition package and used exclusively to more efficiently manage the equipment procurement process. Transition personnel will help to alleviate the time consuming duty of following through and questioning the equipment status of staff sections to insure that new hospital tasks are given appropriate priority.

### **Supplies**

Expendable supply costs required for initial stockage in the new facility must be identified early and continually updated as requirements are clarified. With a new facility, new equipment, and new systems, supply requirements change. For example, medical maintenance will require new repair part stockage. There

will be an initial stock requirement for the pharmacy, an expansion of inventories in central material supply, linen requirements will be increased, new office supply and equipment will require new types of printer cartridges, copy paper, and new medical equipment may require different accessory items. Each functional activity must clearly review their concepts of operation and equipment requirements to identify existing and future supply needs, usage factors and projected costs.

The second part of this equation, after identifying supply needs, is to obtain transition funds to procure supplies over a 2-3 fiscal year period, and to warehouse them as is logistically feasible. This may minimize the risk of an approved one-time lump sum allotment to procure initial transition supply stockage being reduced by Health Services Command just prior to movement due to HSC funding constraints. Transition budget requirements (supply and equipment) are identified in Appendix I.

### **Manpower**

One assumption made when a new hospital is built is that not only will a state-of-the-art facility and equipment be furnished, but that appropriate staffing levels will be provided to allow the new systems to function within the projected workloads. Unfortunately, authorizations are not considered during the programming and design of a new facility and are more a function of Army needs and financial position in a given fiscal year than an endowment for advance planning. While manpower requirements may change due to the functional design of the facility, new

allocations will be contingent on the analysis of mission requirements and demonstrated workload (Appendix J). The completion of the Schedule X, Manpower Staffing Guide, serves to identify requirements and obtain authorizations, as well as providing an excellent tool for Health Services Command and Department of the Army use in assessing upcoming changes in personnel requirements. This is a critical transition task which begins as the new facility is first programmed. Early development of the Manpower Staffing Guides forces the section transition coordinator to examine the initial design in depth; establish spatial and functional work requirements; develop a conceptual plan which can be built-upon during the life of the project; and provides a mechanism by which to keep HSC updated. Such open communication with HSC provides the environment for long-range planning and helps assure that personnel resource requirements are identified prior to the occupancy of the new facility. An added benefit is the requirement for the medical facility to carefully scrutinize their current Table of Distributions and Allowances in order to properly align requirements, authorizations, and allocations based on demonstrated workload measures.

As manpower needs are identified, the justification for new missions and services must be thoroughly documented. The justifications must not only attain the necessary authorizations, but they must convincingly address two other areas. In the case of new missions, such as the proposed Open-Heart Surgery Program, HSC must be shown that an 80% across-the-board authorization to



requirements is inadequate. Due to the personnel intensive nature and necessity for a skilled technical staff, the project cannot afford to run below 100% requirements. If full staffing requirements are not authorized, personnel allocations must be drawn from other clinical or administrative areas of the hospital to man the program. Secondly, with new systems, such as material distribution, positions must be allocated and recruitment actions completed with sufficient lead time, as a minimum 60 days, to implement training activities. Personnel can not be expected to successfully start a completely new mission, which is critical to patient care, without appropriate training.

### Training

Each section will require hospital-wide system training and orientation, section specific training, and specialized area training for new equipment and information and management systems. The majority of this training can be projected far in advance and preparations made, but realistically should not begin until the Provisioning Phase which is approximately the six months before the move into the new facility.

The publication of a project newsletter initiated by the Transition Coordinator and briefings by the New Madigan Project Office can help to facilitate the transfer of information and to keep the staff informed on the progress of new construction, explain new equipment systems, and to keep the channels of communication open. By elevating the general level of awareness of the status of the construction project, the staff will be more

inclined to inquire about issues concerning their sections direct involvement in the transition process.

During the last months before occupancy the contractor will be able to provide hands-on training on the systems that are operational. Enhancing the training process is the capability of the staff to conduct walk throughs of their work and work related areas. The contract specifications should stipulate that training be provided on all major systems at the appropriate user level. In addition, in order to provide back-up reinforcement training and training for future staff, it is suggested that contract specifications require a professional video tape of training at targeted user levels for each system. If contractor provided training tapes are not feasible, the Visual Information Section, Information Management Division, should be tasked to video tape the training sessions. These tapes can provide a valuable training aid and a body of institutional knowledge for the current and future staff.

The Plans, Training, and Security Division is responsible for organizing training within the new medical center. Section transition coordinators should be sent to contractor provided training, as appropriate, with a video tape made of one class for each system taught at least 90 days before the move is planned. This timeframe allows sufficient opportunity to use the video tapes and for the section coordinators to conduct training with their staff. The use of mock patient treatment situations for hands-on training will allow for use of the facility and permit initial operation of the new systems in each area.

Additional training opportunities are available through manufacturer sponsored training seminars as well as through visits to facilities currently using the same systems being installed at the New Madigan. Providing the opportunities for Medical Maintenance, Logistics, Health Care Support Division, and other personnel managing complex systems to attend manufacturer's training seminars is justifiable and can be funded through the transition program resources. Site visits offer the advantage of gaining users' insight into new systems, as well as receiving recommendations regarding system implementation. This type of training must be planned well in advance to budget sufficient resources.

#### **Standard Operating Procedures and Regulations**

One of the more tedious and deferred transitional tasks is the revision or writing of new standard operating procedures (SOPs) and regulations. The natural tendency of the staff will be to delay this task until well after the move-in. Although this may seem logical on the surface, it will cause the staff to have to improvise procedures where no clear-cut guidance is available and lead to mistakes and confusion. Although many of the existing procedures may still be applicable, they should be reviewed in light of the new facility design and equipment/manpower capability. Most of the changes to operating procedures can be worked-out prior to transition, with provisional procedures established. Forcing staff to think through their operations within the context of the new layout and

systems in their area will increase early involvement in the move process and facilitate staff acceptance and understanding of the changes necessary for the transition.

Two areas, fire and disaster plans, will need to be handled as independent transition projects. Because of the complexity and technical detail required, consultants from the Army Corps of Engineers having an in-depth knowledge of the fire and safety systems within the new MAMC should coordinate with the Chief, Logistics Division, the MAMC Safety Manager, and the Ft. Lewis Fire Department for fire and safety systems; and Plans, Operations, Training and Security (POTS) for disaster planning. The Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) in their 1988 Accreditation Manual for Hospitals outlines the requirements for disaster planning and the development of staff protocols (Appendix K). It is imperative that these plans be completed and the staff be inserviced on the new procedures prior to hospital occupancy. It was noted in a visit to one hospital facility that disaster and fire plans were placed in large red vinyl envelopes and mounted on the wall for ready identification and access.

#### **Post-Beneficial Occupancy Day**

Beneficial occupancy day (BOD) is the date designated by the Corps of Engineers, the New Madigan Project Office, and Madigan Army Medical Center, when the Army takes ownership of the hospital facility. The BOD for the New Madigan is scheduled for June 1991. The user may then begin the final building

preparation tasks, making installations, and setting up the building for occupancy while the contractor is still completing construction. In an ideal situation the BOD is derived by calculating the time required for both the user and the contractor to complete all tasks before the scheduled opening day. This interim period is termed the Provisioning Phase and varies from project to project, with MAMC requiring approximately 180 days from BOD to opening day.

At this time the long developed transition plan is put into effect, with only minor adjustments to resolve day-to-day concerns. A number of major building preparation tasks are identified for the Provisioning Phase. They include: the project contractor's work, retrofit work, the installation of Category C equipment, the positioning of supplies, the installation of the interior design package, staff preparation tasks, security, Directorate of Engineering and Housing (DEH) Health Care Support Division interface, and Public Affairs Office and public involvement. Each of these tasks and the involvement of the MEDCEN will be addressed.

Project Construction: The project contractor's work schedule is very heavy during the Provisioning Phase. Major contractor supplied systems will be installed plus a large number of minor items must be finished or reworked. Overlaying this timeframe are the schedules for subcontractors and engineering personnel who must do the retrofit work called for by construction deficiencies, system changes, and the installation of Category C equipment. The potential for scheduling conflicts

is great and must be handled through a central clearing post for maximum efficiency. The assignment of the Chief, Logistics Division, with his office moved to the new facility at BOD, is an effective means of keeping scheduling conflicts minimized and swiftly addressing problem areas.

Retrofit: Retro-fit work is construction modifications which are deferred because they are not essential to the main construction contract progress, and do not greatly influence either the cost or main construction contract schedules. This approved work may be more economically and effectively managed with a separate contract through competitive procurement rather than having the project contractor complete the work for those items. Retro-fit work falls into three categories: Program Items are those which were planned for but will be installed by contractors other than the project contractor; User Request Changes recommending that ongoing work be modified, added to, or deleted; and Mandatory Changes which are necessary to correct omissions or design errors. Retrofit work will be accomplished concurrently with the Provisioning Phase (Appendix L). Termed Phase III follow-on construction, \$10 million of the nearly \$278 million of the current working estimate for the project is programmed for retro-fit work.

Category C line items: The number of Category C line items purchased for the new facility will total in the hundreds. Initial involvement by the New Madigan Project Office and the Corps of Engineers in the selection of equipment is essential in order to minimize equipment conflicts due to inadequate space,

inappropriate power hook-ups, lack of sufficient ventilation, heating or air-conditioning, or the failure to provide drainage. These equipment considerations must be met by the items selected or require expensive Engineer Change Proposals or Retro-fit work to make them compatible. Each piece of Category C equipment must be critically reviewed and its selection coordinated with the New Madigan Project Office. Classification of the Category C equipment as to whether it will be contractor or MAMC installed is further required. For those equipment items to be installed by MAMC, Logistics should identify the personnel requirements and installation schedules well in advance of BOD. Additional Medical Maintenance Technicians and work details are essential and, if understaffed, may impose critical time delays.

Interior Design Package: The selection of furnishings from the Interior Design Package is coordinated with the New Madigan Project Office and the individual activities. The sections should be prepared to indicate the special requirements and particular needs of their areas. They should be able to identify the type and quantity of furniture desired, making selections from the available options. The AutoCad system will be available to ensure that selected items will fit appropriately into the design space.

The management of the Interior Design Package will rest with Madigan Logistics whose responsibilities include the procurement of furniture and furnishings (F&F), their storage, assembly, placement, and property book identification. Ideally, furniture and furnishings should be scheduled for delivery along time-lines

that minimize their storage time. The assembly and placement of F&F should be coordinated with contractor time-lines to keep work areas free and minimize damage to furnishings. Additionally, the man-hours required for assembly and installation/placement can be estimated so that adequate manpower is available during scheduled assembly and placement times. The procurement of manufacturer assembled and/or installed F&F is an involved process that must be coordinated with Installation Purchasing and Contracting to insure that installation guidelines have been addressed in the contract specifications. User considerations for the Interior Design Package are addressed in detail in Appendix M.

Staff responsibilities: The staff of each section will be tasked with certain responsibilities which will contribute to the smooth transition and move into the facility. It is imperative that each task be completed thoroughly and that the assigned personnel have as broad an understanding of the importance of their tasking as possible. The assignments will include reviewing the design, selecting appropriate equipment and furnishings, following-through on equipment and expendable supply orders and their receipt, developing a section specific transition movement plan, planning and conducting training oriented to the new physical layout and equipment systems in the facility, and rehearsals for move day that have included contingency plans. It is essential that frequent visits to the new facility be made and, if possible, have training operations conducted on-site. This will facilitate equipment and system familiarity and impart a sense of proprietorship in the new



facility. Such visits provide the operational experience to effectively modify and develop provisional standard operating procedures. They must, however, be closely coordinated between the sections, Logistics, and the New Madigan Project Office to minimize disruption of ongoing construction. Transitional funds required for training purposes, for example overtime pay and supplies, should be identified and submitted to the Transition Coordinator for consolidation as a part of the overall Training Requirements Package.

Security: One imperative 180 days pre-BOD and during the Provisioning Phase is the arrangement of security for the building, its contents, and the personnel working there. During this period, in addition to the numerous construction workers, the facility will be occupied by a large number of staff and visitors, who are touring, conducting training, and installing equipment and furnishings. Since the hospital contains approximately 1.2 million square feet of floor space, physical security will need to be addressed at several levels. Access to the hospital should be limited to designated entries with guards positioned to monitor foot traffic in and out of the building. The issue of permanent security badges for hospital personnel and temporary passes for visitors is planned. The Logistics Division staff operating in the facility should take responsibility for securing the loading dock entrances and regulating personnel bringing equipment in or out of the facility. As a part of section training, the procedures for security in the hospital and within the section during the Provisioning Phase should be

stressed. It is the MAMC Provost Marshall's responsibility to arrange for post military police to patrol the exterior of the building during the day, after duty hours, and on weekends. Should interior security be deemed a MAMC function, the funding for contract security personnel should be budgeted based upon the planned internal occupancy of the building. These measures help minimize theft and vandalism while still affording access to working areas.

Directorate of Engineering and Housing / Health Care Support Division: The Army will take possession of some areas of the new medical center, such as radiology, up to 180 days prior to BOD, for the installation of government furnished equipment. The Directorate of Engineering and Housing's Health Care Support Division (HCSD) must be in a position to assume responsibility for the maintenance of the facility and its systems. There will be a phased involvement of HCSD beginning before BOD as equipment maintenance schedules come online. This means that Engineering personnel must be fully trained on hospital systems, understand the scope and specifics of warranties available, and must have a program of scheduled operations and maintenance in place. Construction modifications relating to equipment installation will be accomplished during follow-on construction. HCSD will provide repair service for vandalism, accidents, and wear and tear during Provisioning and move-in. Work requests for repair are made to HCSD who determines, in conjunction with the Madigan Area Office of the Seattle District Corps of Engineers, if the work is warranty or an HCSD responsibility. Prior to transition,

protocols and policies for the determination of response times for equipment failures must be jointly developed by the HCSD and the individual sections (Appendix N).

The areas most impacted by the start-up of a new facility are the Logistics/Material Branch and HCSD. In order to best prepare for the transition, HCSD has taken a strategic approach by developing a New MAMC Maintenance Plan which addresses each major element required for DEH to assume full maintenance responsibility for the new facility. The document outlines such important considerations as HCSD organizational structure, contract vs in-house maintenance responsibilities, agreements between Logistics and HCSD concerning areas of maintenance responsibility, resource estimates for contract and in-house functions, a projected budget for new facility maintenance, and manpower and training requirements (Appendix O). In addition, the development of a Madigan Army Medical Center Project Turnover Plan has been drafted to delineate responsibility and procedures for the transfer of the facility from the Seattle District Corps of Engineers to the Fort Lewis DEH. This document will also serve as a historical reference for future operations and maintenance activities (Appendix P).

An early decision must be made whether maintenance will be contracted or remain in-house. This decision will be a function of availability of personnel authorizations to support the maintenance function. Should maintenance be contracted in the new facility HCSD will act in the capacity as the Contractor Officer Representative (COR) and must provide a minimum lead-time

of one year to write specifications and have the contracted personnel in position prior to BOD to benefit from project contractor supplied system inspections and training. To augment their maintenance function, HCSD is scheduled to receive a computer and maintenance software package for generating maintenance schedules.

MAMC should develop guidance and policies for retro-fit construction that will be allowed in the hospital upon occupancy. It is MAMCs responsibility to coordinate with HCSD in determining an estimated figure for annual minor construction costs since DEH will perform new construction only if the costs are reimbursed by MAMC. Funds for this construction must be planned for and allocated to avoid requests for emergency funds from HSC or taking money from hospital operating funds.

Public Affairs: The Public Affairs Office (PAO) should begin to formulate their role in the transition as a member of the New Madigan Project Group and the Transition Taskforce. In addition, the PAO must work closely with the New Madigan Project Office in the development of the public relations plan for the new medical center. There has been tremendous interest on the part of the community in the new Madigan hospital project. Numerous tours have been conducted for VIPs, both military and civilian. The news media have been active in publicizing the continued status of the construction project (Appendix Q).

At BOD the community interest and activity surrounding the new facility will only mount. There will be many requests for tours, the local news media will require information on project

progress, and the PAO will need to coordinate all information regarding open houses, the dedication ceremony, and the transfer of medical operations from the old to the new facility to keep the public fully informed and the information accurate.

The use of well trained volunteers to conduct general public tours weekly will help alleviate the demand. VIP tours should continue to be coordinated and conducted through the Command headquarters. The development of a new Madigan hospital guide book for the staff and beneficiaries by the Public Affairs and Patient Representative office would assist in providing much needed information. Such a booklet should include a description of the new facility with a floor plan, general hospital information, department specific information such as clinic hours and phone numbers, and safety and emergency information.

### **Move Planning**

Movement and occupancy plans should be developed by each section well before the actual move. It must be remembered that the move to the new facility consists of two parts; movement of the department or service, and the movement of the patients. Appendix R outlines guidance and direction for executing the actual move into the new facility. Decisions must be made in advance whether or not to contract the move. Should all or parts of the move be contracted, costs should be programmed into the transition budget. Additional information can be obtained from the after action reports of other facilities (Appendix S). It is incumbent upon the Transition Coordinator to organize the

planning effort, insure that each section has addressed all aspects of the move in their plans, and to integrate the section move plans into an overall move plan. Two weeks have been projected for the move into the new hospital facility.

#### **Post-Move Tasks**

The resumption of normal operations within the new facility ends the implementation of most of the transition plan except in the area of training where hands-on training with new hospital systems will become more intensive. The heaviest post-occupancy workload will be experienced by the Logistics Division. Medical equipment items which were required up to the last day in the old facility must be reinstalled according to schedule in the new facility. For example, the Cardiac Catheterization Lab will require 90-120 days to be relocated in the new facility. Logistics must coordinate the delivery of all transferred items, turnover hand receipts, and turn-in equipment and real property left in the old hospital. Detailed space utilization plans and Memorandums of Understanding must be in place prior to the turn-in of equipment and property since the old facility will be retained in place for use as bed expansion upon mobilization, provide some administrative space for Ft. Lewis as well as providing both clinical and administrative areas for MAMC activities with insufficient space in the new facility (Appendix T). This post-occupancy period will take many months and require careful scheduling of Logistics resources and manpower before the

Division is finally able to turn its full attention on the new facility.

### Endnotes

<sup>1</sup> AutoCad is a sophisticated software program for computer aided drafting and design. The program has the capability of indicating architectural layout, electrical layout, communications, and fixed equipment placement.



### III. CONCLUSION AND RECOMMENDATIONS

The purpose of this paper was to develop transition plan requirements for moving from the existing hospital into the new medical facility at Madigan Army Medical Center. Having had past experience in two previous hospital construction and renovation projects, the element lacking at the user level from the onset was an overall conceptual framework by which to sensitize staff to the scope and depth of detail that must be addressed in the design review and transition process as well as their responsibilities in accomplishing that end. This paper was intended to fill that technical gap.

The major issue facing the movement into the new hospital facility is the development of a timely and relevant transition plan. A clearly defined, stepwise approach to transition, integrated with the hospital's strategic plan, will serve to build consensus and be a driving force toward successful transition implementation.

The analysis of after action reports and transition plans from a variety of military hospital facilities clearly indicated the pre-move, move, and post-move transition tasks which must be planned and coordinated prior to the actual move. Discussion on how to implement such a plan and the major transition areas requiring extensive development have been noted. Top management must play an integral leadership role in the development and implementation of the planning document as well as mandating that actions toward transition begin at all levels.

The following recommendations have been derived from the preceding discussion. First, Madigan Army Medical Center needs to develop a strategic plan as a blueprint for future direction and the efforts that must be taken to accomplish the defined objectives, critical tasks, and goals within established milestones. The plan must be action oriented and tied into the future mission and transition efforts and actions at the operational level.

Secondly, the formation of a MAMC Transition Taskforce is needed to develop and implement a strategic transition plan at the Madigan user level. The taskforce would serve as a formal body for information sharing, the evaluation of plans, the clarification of tasks that are interdisciplinary in scope, and to provide feedback to the sections for goal development and program execution.

With the assumption of duty the Transition Coordinator should establish critical path networks for each transition milestone, their time relationships, and the tasks that must be accomplished.

Having moved past the design review phase, efforts at this point should concentrate on the development and refinement of each section's concept of operations, equipment selection and placement, and manpower resourcing.

Staff must be sensitized to the necessity of a taking proactive approach in meeting their section transition obligations. The fact is that decisions will be made whether sections contribute their input and concerns or not; therefore,

it behooves section transition coordinators to keep abreast of changes that will impact on their areas and to solicit opportunities that allow their input. Conversely, it is imperative that the New Madigan Project Office, with their broader knowledge-base in construction, equipment, and transitioning, assume a teaching role regarding section involvement and invite comments in situations where sections may not realize their input is of value.

Wide dissemination of information to the staff in the form of construction progress briefings, published newsletters, and training is needed in order to build proprietorship and understanding of the new facility, its systems, and to create an environment and conditions conducive to accepting change and accomplishing section transition goals.

APPENDIX A

NEW HOSPITAL PROJECT GROUP

**2-32 New Hospital Project Group (NHPG)****a. Composition:**

Deputy Commander for Administration (Chairman)  
Deputy Commander for Clinical Services  
C, Dept of Nursing  
C, Logistics Division  
Admin Coordinator, DCCS  
C, Health Care Support Division, DEH  
C, Resource Management Division  
Automation Management Officer (w/o vote)  
Nurse Project Officer (w/o vote)  
C, Health Facility Project Officer (Recorder w/o vote)  
Public Affairs Officer (w/o vote)  
Attendance of other staff members as determined by the subject matter and at the chairman's discretion. These persons will attend without voting privileges.  
Transition Officer for the New Madigan Project

**b. Purpose.** To serve as the reviewing body recommending approval/disapproval to the Center Commander on MEDCEN requested functional changes to the new hospital project. Originate concerns and recommendations related to the construction project in areas such as: design changes, equipment selection, systems development, organizational or manpower development, and transitional planning which will be approved by the New Hospital Project Group prior to implementing actions by the Health Facility Project Office (HFPO). The NHPG will approve all MEDCEN generated input to the design and construction process. Change orders to correct discrepancies or errors in the contract documents, or to permit installation of approved equipment will be the responsibility of the HFPO without action required by the NHPG. The Executive Agents will be responsible for implementing decisions of the NHPG and coordinating daily operational requirements with designated MEDCEN points of contact at the functional level. The NHPG will serve during design finalization, construction, and transition into the new hospital.

**c. Meetings.** Quarterly

**d. Minutes.** The original will be submitted to the Center Commander for approval. After approval, the original and eight copies will be forwarded to the recorder, Executive Committee.

**e. Office of Record.** Information Management Division

**f. Reference.** Health Facility Project Officer Guide.



DEPARTMENT OF THE ARMY  
MADIGAN ARMY MEDICAL CENTER  
TACOMA, WASHINGTON 98431-5000

REPLY TO  
ATTENTION OF

SGFF-PM-28 (15-1A)

22 April 1988

MEMORANDUM FOR: Commander, Madigan Army Medical Center, Tacoma, WA 98431-5000

SUBJECT: Minutes of New Madigan Project Group Meeting

1. The New Madigan Project Group Meeting was held 24 March 1988, 1000, in the HQ Conference Room.

2. Members present:

COL Ella L. Fletcher, Nurse Methods Analyst  
COL Martin W. Sargent, Executive Agent  
COL Lyle W. Warner, C, Logistics Division  
LTC Dennis E. Meyer, Admin Coord, DCCS  
LTC William Cahill, Dir, Resource Mgmt  
MAJ Patrick H. Burns, C, AMO  
Mr. Geoffrey Glass, DEH, MAMC

Members absent:

COL T. M. Pittman, DCA, Chairman  
COL Leslie M. Burger, DCCS  
COL Naldean J. Borg, Dept of Nursing  
Mr. Chris Hober, PAO

Non-members present:

COL Elmer M. Casey, Jr., Office of DCCS  
COL Gerald Halvorson, Dept of Pathology  
COL Dewey R. Miller, representing chairman  
MAJ James C. Simmons, Asst C, NMFO  
MAJ Gail Maestas, representing Dept of Nursing  
CPT Tom N. Keyes, CMS  
Mr. Bill Victory, MEDCASE Mgr  
Mr. Paul Shorb, AMO

3. Old business:

a. Minutes from the 9 Dec 87 meeting, which were approved, signed and distributed in December, were reviewed.

b. Equipment Lists - COL Fletcher reported that 65% of the activities have received their drawings and equipment lists. Logistics has done reconciliations on 50 activities and NMFO is getting the combined lists out promptly. COL Fletcher emphasized to the members that it would also be very helpful if the POC's send their requirements lists back to this office promptly.

SGFF-FM-28

SUBJECT: Minutes of NMPO Meeting

d. Automation Planning

(1) MAJ Burns requested that consideration be given to relocating the head end equipment of the coax system in the computer room rather than in Audio Visual. Following discussion by the group, COL Sargent stated that after the problem is evaluated and requirements are known, the NMPO will submit a change proposal on this issue.

(2) MAJ Burns reported that the composite health care system (CHCS) has been installed and is working at Fort Knox and urged members to look at it. It is programmed for FY 93 for our facility. COL Casey suggested that MAJ Burns initiate a letter for BG Powell's signature to try to get the target date for the CHCS moved up.

(3) Dept of Pathology at this time is attempting to get a lab computer support system. They want to get something as an interim system now, but COL Halvorson hopes to get a turn-key type system through MEDCASE funds for the new facility. If this effort fails, he will put the interim system into the new hospital. COL Sargent stated that the interim system possibly could be funded by BLIC F funds.

e. Equipment Acquisition Program - COL Warner introduced Mr. Bill Victory, the new MEDCASE Manager and reported that out of 31 MPRs submitted to MEDCASE, 23 have been approved, 1 was not eligible, 6 were returned for resubmission and 1 was returned which did not require resubmission. Of the 6 resubmissions, 5 were routed within MAMC and 1 was returned to the activity. There were 17 PRs submitted to Huntsville.

f. Specific furnishings issues - COL Sargent reported the following:

(1) The sterilizer package is out for bids.

(2) One big issue has been discovered concerning the use of systems furniture in the doctor's offices. One-half inch gypsum is being used throughout the new hospital and the manufacturers will not hang systems furniture on the walls. Omaha Corps of Engineers is now contacting other manufacturers to find out if they can meet our requirement.


(3) COL Sargent asked about the status of the paper on the use of BLIC F funds. COL Warner stated they are going to adhere to the policy that any equipment bought with BLIC F funds for the current facility will go to the new hospital and must be approved by the NMPO.

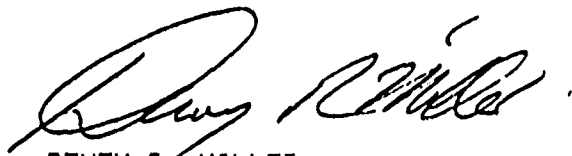
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SGFP-PM-28

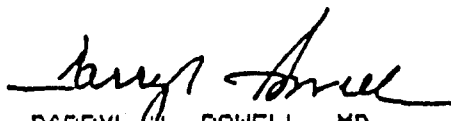
SUBJECT: Minutes of NMFG Meeting

5. There was no further business and the meeting adjourned at 1100. COL Casey suggested that the next meeting be held after the new DCA arrives in July 1988.

  
 MARTIN W. SARGENT  
 COL, MS  
 Executive Agent/Recorder

  
 DEWEY R. MILLER  
 COL, MS  
 Acting Chairman

Approved/~~Disapproved~~

  
 DARRYL A. POWELL, MD  
 Brigadier General, MC  
 Commanding

## DISTRIBUTION:

Each member - 1  
 Executive Committee - 9  
 Each NON-member present - 1

*approval of MRE  
 approval of 72 million - full funding*



NEW MADIGAN PROJECT OFFICE  
FORT LEWIS, WA

ENGINEERING CHANGE PROPOSAL LOG SHEET

ECP NO	ECP TITLE	DATE PREPARED	ACTION CODE	ACTION DATE	PHASE NO	CASE NO	MOD NO	EST COST	ACT COST	REMARKS
• ECP-001	CH SONIC CLEANER	07/11/86	A	03/25/86	2	13	NTP	2000	0	
• ECP-003	DELE MIRROR UNIT	08/13/86	A	03/25/86	2	7	16	-4685	-6223	
• ECP-004	DELE NAT GAS IN DTR	10/07/86	A	12/02/86	2	7	16	-800	-50000	*COST FOR CASE-27
• ECP-005	RD FOR NEPHROLOGY SVC	10/03/86	A	12/02/86	2	7	16	4500	-50000	*COST FOR CASE 27
• ECP-006	CARDIO PULM CHANGES	10/03/86	A	12/02/86	2	7	16	-1200	0	ITEM #1 ONLY
• ECP-008	DOOR CHANGES TO OR	10/31/86	A	12/02/86	2	7	16	-1200	0	
• ECP-010	ALL/IMM PNT HOLD EXP	10/21/86	A	05/27/87	2	26	NTP	-8300	0	PRIVACY PART. TO BE ADDED PHASE 3
• ECP-012	ADD SINK & COUNTERS G-85-6	10/23/86	A	12/02/86	2	7	16	2500	0	
• ECP-013	DEL-INTERVIEW RM-1-94-14	10/23/86	A	12/02/86	2	23		-1175	0	
• ECP-015	CHANGE TO SWS	10/22/86	A	12/02/86	2	7	16	-121	0	ITEM #2 ONLY
• ECP-018	GFE CHANGES	10/23/86	A	12/02/86	2	11	NTP	-74862	0	
• ECP-021	EMERG POWER-FOR-INF-TRANSPIR	11/03/86	A	12/02/86	2	7	16	-450	0	ITEM #1 ONLY
• ECP-022	X-RAY CHEST RM/TOILET	11/03/86	A	12/02/86	2	22	NTP	-150	0	
• ECP-023	DEL DICTATION BTH RM 1-54-24	11/13/86	A	12/02/86	2	7	16	-4000	0	
• ECP-025A	S-UTILITY RM-ER	05/05/87	A	05/27/87	2	26	NTP	300	0	
• ECP-026	PEDS NURS UNIT CONTROL DRS	11/17/86	A	12/02/86	2	23		2000	0	ITEM #2 ONLY. REBUTTAL SENT
• ECP-027	REV TO UROLOGY CL	11/17/86	A	12/02/86	2	23		7500	0	ITEMS #3-5, #2 APP 08/05/87. CASE 41
• ECP-031	SUBSTITUTE BURN TANKS	12/04/86	A	05/27/87	2	23		-10000	0	REVISED 05/27/87.
• ECP-032	BACKING PLATE/TV MNTG BRKTS	12/10/86	A	02/25/87	2	11	NTP	-5000	0	SL 1554 CHANGED M1290 TO M1291
• ECP-033	CASEWORK, RM-G-23-17	12/16/86	A	02/25/87	2	22	NTP	8000	0	
• ECP-037	CHANGES TO OUTPAT PHARMACY	01/15/87	A	05/27/87	2	26	NTP	-10000	0	HPPA DF 9 APR 87
• ECP-038	CHANGES TO INPAT PHARMACY	01/23/87	A	05/27/87	2	26	NTP	-1900	0	HPPA TO BE PROC. BY HDE CAT A
• ECP-042	BMO CHANGES	02/12/87	A	02/25/87	2	22	NTP	15000	0	HPPA DF 12 MAY 87. APPROVED
• ECP-044	ROOM STATUS SYS	03/23/87	A	03/25/87	2	23		1000	0	ALSO SL 0892 DTD 03/27/87
• ECP-046	CHNGS LOCAL AREA PAGING SYS	03/25/87	A	05/27/87	2	23		2500	0	SL 1554 CHANGED M1290 TO M1291
• ECP-048	CL INVS OXY/NI OX DEL	04/08/87	A	05/27/87	2	26	NTP	-5000	0	HPPA DF 12 MAY 87. APPROVED
• ECP-050	ADD SINKS TO SAT. PHARMACIES	05/11/87	A	05/27/87	2	29		20000	0	ALSO SL 0892 DTD 03/27/87
• ECP-051	CHANGES TO MAIL ROOM	05/12/87	A	05/27/87	2	23		1000	0	SERIAL LTR 813 TO BEC
• ECP-052	SD SURGERY PATIENT SUPPORT	05/15/87	A	05/27/87	2	26	NTP	-5000	0	HPPA DF 7 JULY 87. APPROVED
• ECP-054	QUALITY ASSUR, ADJ & CLIN SVCS	06/02/87	A	05/27/87	2	29		20000	0	ITEMS 1, 2 & 3 ONLY.
• ECP-055	AD WORK CORE CONTROL DOOR	06/11/87	A	08/05/87	2	59		30000	0	
• ECP-057	DEL. MOUNTING IN RM 1-29-10	06/18/87	A	08/05/87	2	41	NTP	-5000	0	HPPA DF 7 JULY 87. APPROVED
• ECP-058	UTIL. FOR X5330, RM 2-43-12	06/23/87	A	08/05/87	2	62		4500	0	ITEMS 1, 2 & 3 ONLY.
• ECP-060	SEPARATE ACC. FOR REC. SVS.	06/26/87	A	08/05/87	2	41	NTP	2000	0	
• ECP-062	BMO OUTLETS FOR NURSERY	07/12/87	A	12/03/87	2	62		0	0	
• ECP-064	SURGICAL CLINIC CHANGES	08/04/87	A	12/03/87	2	63		33350	0	
• ECP-065	REV HEMATOLOGY/ORICOLOGY CHANGE	08/10/87	A	12/03/87	2	63		20000	0	ITEMS 2-5. REV TOILET-LOCATION
• ECP-066	NEW PED CLINIC DELECTIONS	08/12/87	A	12/03/87	2	63		0	0	NO COST
• ECP-068	NEW LINEN AREA DOOR CHANGES	08/28/87	A	12/03/87	2	63		2000	0	
• ECP-069	SIGN SYSTEM DELECTIONS	09/03/87	A	12/03/87	3	60	NTP	-81630	0	SIGNS DELETED PHASE 2
• ECP-070	SHOCK/TORAMA RM CHANGES	09/17/87	A	12/03/87	2	56		0	0	SL 2690
• ECP-071	DAYLIGHT PROCESSING	09/17/87	A	03/24/87	2	52	NTP	-45325	0	
• ECP-072	NURSE CALL CHANGES OR	09/22/87	A	12/03/87	2	62		0	0	
• ECP-073	CHANGES TO ROOM STATUS SYS	09/25/87	A	12/03/87	2	62		6000	0	VERBAL APP PER TELCON
• ECP-074	ELEVATOR CONTROLS PSE NO 1	10/03/87	A	12/03/87	2	62		2500	0	

NEW MADIGAN PROJECT OFFICE  
FORT LEWIS, WA

ENGINEERING CHANGE PROPOSAL LOG SHEET

ECP NO	ECP TITLE	DATE PREPARED	ACTION CODE	DATE	PHASE NO	CASE NO	MOD NO	EST. COST	ACT. COST	REMARKS
ECP-075	ARC PHONE & DOOR CHANGE	10/03/87	A	10/23/87	2	45		800	0	
ECP-076	ATS BULK STORES TOW SUBSYSTEM	10/21/87	A	12/03/87	2	61	NTP	-20000	0	
ECP-078	PNEUMATIC TUBE COMPUTER SYS	10/22/87	A	12/03/87	2		LTR	0	0	SL 2275
ECP-079	ATS CONTROL CONSOLE & CCTV	10/22/87	A	12/03/87	2		LTR	0	0	SL 2491, 2636
ECP-080	ABC DISPLAY PANEL/COMPUTER	10/22/87	A	12/03/87	2		LTR	0	0	SL 2463
ECP-085	US POST OFFICE CHANGE	02/11/88	A	03/08/88	2	68		900	0	
ECP-082	DEM FLOOR FINISH CHANGE	12/21/87	A	03/08/88	2			-5900	0	
ECP-086	CASE CART CHANGE	03/02/88	A	03/08/88	2			50000	0	
ECP-087	FLOW CYTOMETER RM	03/04/88	A	03/08/88	2			50000	0	
ECP-082	PROVIDE FLAG POLE	07/18/86	D	07/25/86	3			21423	0	EXCEPT MONITOR DELETIONS
ECP-083	CHANGES TO L & O	10/21/86	D	12/23/86	3			-210	0	
ECP-084	REV TO RM 6-55-03 OB/GYN CL	10/22/86	D	12/23/86	3			6326	0	
ECP-028	HOSPITAL GRADE RECEPTACLES	11/21/86	D	12/02/86	3			30000	0	DEFERRED
ECP-030	LOCKING DEVICES FOR NURSESTATIONS	12/04/86	D	04/23/87	2	16	10	48000	-4420	DEL S/S PAN ONLY CASE 16
ECP-032	AUDIOLOGY BIR CHNG & INCONSIST	01/13/87	D	05/27/87	3	21	10	12000	-21000	A/800THS DEL / CASE 39 ADD SINKS
ECP-036	ETO ALARMS	01/14/87	D	02/26/87	3			1600	0	
ECP-040	CHANGES TO OCCU THERAPY	01/26/87	D	05/27/87	3			4400	0	
ECP-041	FEDS PAT MONITORS AL BED LOCA	02/11/87	D	05/27/87	3			20000	0	HFFA DF 9 APR 87
ECP-047	WALL GD, MR & RG CHANGES	04/06/87	D	05/27/87	3	19		27000	0	CORRIDOR CG INSTALLED BY PHASE 2
ECP-049	CLOSED CIR TV/PA FOR CHAPEL	05/05/87	D	05/27/87	3			7000	0	HFFA DF 7 JULY 87, APPROVED
ECP-051	REC & LGT FOR CARWASH & S4450	05/12/87	D	05/27/87	3			2000	0	SEE CR-002 DTD 11 JULY 86
ECP-056	GI ENDOSCOPY CENTER	06/12/87	D	12/03/87	3			-3000	0	CASE 63 (PH2) SU RM REMAINS FOR PH3
ECP-063	NUCLEAR MEDICINE CHANGES	07/22/87	D	12/03/87	3			62000	0	CASE 64 (PH2)
ECP-077	CHANGES TO HARDWARE SCHEDULE	10/22/87	D	12/03/87	3			12000	0	SCOPE TO BE DETERMINED
ECP-081	DICTATING SYSTEM (1-95-1)	11/30/87	D	12/03/87	3			0	0	SCOPE AFTER EQUIP IS PURCHASED
ECP-083	TELEPHONE CHANGES	/ /	D	03/08/88	3			0	0	CE - \$15000
ECP-084	CYSTO/IVP RMS EQUIP INST	/ /	D	12/02/86				0	0	REBUTAL SENT CE \$32000
ECP-087	REV TO PT CLINIC	10/16/86	X	12/02/86				0	0	REBUTAL SENT CE \$5238
ECP-088	RECOVERY ROOM GI CLINIC	10/21/86	X	12/02/86				0	0	CE - \$2000
ECP-089	FED CL DEVELOPMENTAL	10/23/86	X	12/02/86				0	0	CE - \$4437
ECP-091	FED CL TREATMENT ROOMS	10/23/86	X	12/02/86				0	0	CE \$600
ECP-093	PHYS MED COMBINE Q/E	10/23/86	X	12/02/86				0	0	
ECP-094	CONVERT 3-28-13 TO OFC/REPO	10/23/86	X	12/02/86				0	0	
ECP-095	OB/GYN CL CHILD CARE WAITING	11/14/86	X	12/02/86				0	0	
ECP-096	SOILED UTIL RM ER	11/14/86	X	12/02/86				0	0	
ECP-097	CHANGES TO HEMA/DNC	01/12/87	X	05/27/87				0	0	DF 07/07/87 CE \$12000
ECP-098	OPTOM EYE LANE CMGS	02/17/87	X	05/27/87				0	0	DF 05/12/87 CE \$15000
ECP-099	RM STATUS SYS CON/TRANS CHNG	03/20/87	X	12/03/87				0	0	DF 07/07/87 CE \$25000
ECP-100	FED. PLAYROOM SINK, RM 1-77-23	06/23/87	X	08/05/87				0	0	CE \$4000
ECP-101	CHANGES FOR MC JAG	06/26/87	X	08/05/87				0	0	CE \$4000
ECP-102	SS CASEWORK FOR G-5-10/G-05-29	08/29/87	X	12/03/87				0	0	CE \$12000

**APPENDIX B****FORT CARSON TRANSITIONAL PLANNING WORKGROUP**

TRANSITIONAL PLANNING PACKET  
TAB B  
PURPOSE OF TRANSITIONAL PLANNING WORK GROUP (TPWG)

1. The purpose of this Transitional Planning Packet Tab is to familiarize staff members with the purpose, composition, functions, and operation of the Transitional Planning Work Group (TPWG).

2. The TPWG was established by the MEDDAC Commander to promote staff communication and interface in the accomplishment of transitional planning tasks, and to provide overall direction and impetus to the transitional planning effort. Its specific functional responsibilities are as follows:

- a. Identify transitional planning issues which require the formulation of command positions/policies and refer to appropriate decision-making body for action and subsequent issue of planning guidance.
- b. Promote the exchange of information/knowledge which will facilitate transition planning efforts and contribute to the identification of all transitional tasks which should be undertaken.
- c. Identify all major transitional tasks which must be accomplished, recommending the assignment of action proponentcy, tentative target date for completion, and internal/external elements with which coordination will be required.
- d. Recommend reassignment of action proponentcy, as appropriate.
- e. Receive, review and approve all plans as developed by action proponents for the accomplishment of major transitional tasks and related subtasks.
- f. Monitor the progress of on-going transitional tasks and related subtasks, so as to promote their accomplishment in an effective, timely and well-coordinated manner.
- g. Review the status of tasks/subtasks which are significantly behind schedule or can not be accomplished, formulating/recommending alternative solutions or approaches as appropriate.
- h. Via the membership, serve as a conduit for the dissemination of information to all hospital elements as to what is being done by whom to prepare for occupying and operating the new hospital.

3. The membership of the TPWG is as depicted at Enclosure 1 to this Tab. While admittedly a large group, it insures that all key functional activities are represented, as well as provides for an established network of staff points of contact through whom information can be disseminated concerning the status of transitional planning activities and what is being done by whom to prepare for operations in the new hospital.

4. Enclosure 2 to this Tab projects the TPWG's schedule of meetings through the end of 1985. Chiefs of Services/Branches who are not standing members of the TPWG may attend meetings if desired, either to surface issues/problems/proposals for consideration or to simply observe and become more cognizant of transitional planning activities. Meetings are typically held in Baird Hall.

Tab B Continued:

5. The TPWG employs a standing agenda, as depicted at Enclosure 3 to this Tab. Members (or other hospital staff personnel) desiring to have issues/problems/proposals presented to the TPWG for review and consideration should contact the Transition Coordination Office for further information (Tele #'s X4452/2955, Points of Contact: LTC Brown/LTC Sauter/MSG Ware/Ms Cardin). Members of the TPWG are usually provided with a read-ahead packet, which is distributed on the Friday afternoon preceeding the next week's scheduled meeting on Thursday.

6. Formal minutes of TPWG meetings are not maintained. Issues/problems/proposals as surfaced at a TPWG meeting which require attention of the Construction Project Group (CPG) will typically be assigned to a member of the TPWG for follow-up action. The tasked TPWG member will coordinate assembly of all necessary information and development of a decision briefing for presentation to the CPG.

MEMBERSHIP  
TRANSITIONAL PLANNING WORK GROUP (TPWG)

1. Deputy Commander for Administration (Chairperson)
2. Deputy Commander for Clinical Services
3. Chief, Department of Medicine
4. Chief, Department of Surgery
5. Chief, Department of Psychiatry
6. Chief, Department of Nursing
7. Chief, Department of Dentistry
8. Chief, Department of Radiology
9. Chief, Department of Pathology
10. Chief, Social Work Service
11. Chief, Pharmacy Service
12. Chief, Department of Ministry and Pastoral Care
13. Adjutant
14. Chief, Logistics Division
15. Chief, Patient Administration Division
16. Chief, Personnel Division
17. Chief, Nutrition Care Division
18. Chief, Comptroller Division
19. Chief, Plans, Operations and Training Division
20. Chief, Clinical Support Division
21. Chief, Preventive Medicine Activity
22. Chief, Community Mental Health Activity
23. Health Facilities Project Officer
24. Hospital Field Director, American Red Cross
25. Chief, Infection Control Service, Department of Nursing
26. Chief, Nursing Education and Training Section, Department of Nursing
27. Chief, Medical/Surgical Nursing Service, Department of Nursing
28. Chief, Ambulatory Nursing Service, Department of Nursing
29. Chief, Operating Room Service, Department of Nursing
30. Chief, Ancillary Support Branch, Clinical Support Division
31. Chief, Ambulatory Support Branch, Clinical Support Division
32. Chief, Materiel Branch, Logistics Division
33. Chief, Property Management Branch, Logistics Division
34. Chief, Service Branch, Logistics Division
35. Chief, Medical Maintenance Branch, Logistics Division
36. Nursing Methods Analyst, Health Facilities Project Office
37. Command Sergeant Major
38. Transition Coordinator (Recorder)

Encl 1 to Tab B

TRANSITIONAL PLANNING PACKET  
TAB H  
SCHEMATIC DEPICTING WAYS FOR ISSUES/PROBLEMS TO BE SURFACED FOR RESOLUTION

1. Relocation of a functioning hospital from an old facility into a new, with no break in continuity of operations, is a complicated undertaking involving a multitude of preparatory actions. Many of these actions must be undertaken far in advance in order to provide enough lead-time for necessary coordination to be effected, funding to be programmed, equipment to be procured, etc. It is imperative that the planning effort serves to identify issues/problems in sufficient time for an orderly plan of action to be developed which will lead to their timely and effective resolution.

2. Even with the best of planning efforts, not all issues/problems can be identified and resolved in advance. A major objective of the planning effort, however, should be to anticipate as many as possible, so that the number which do surface at a later date is kept to an absolute minimum.

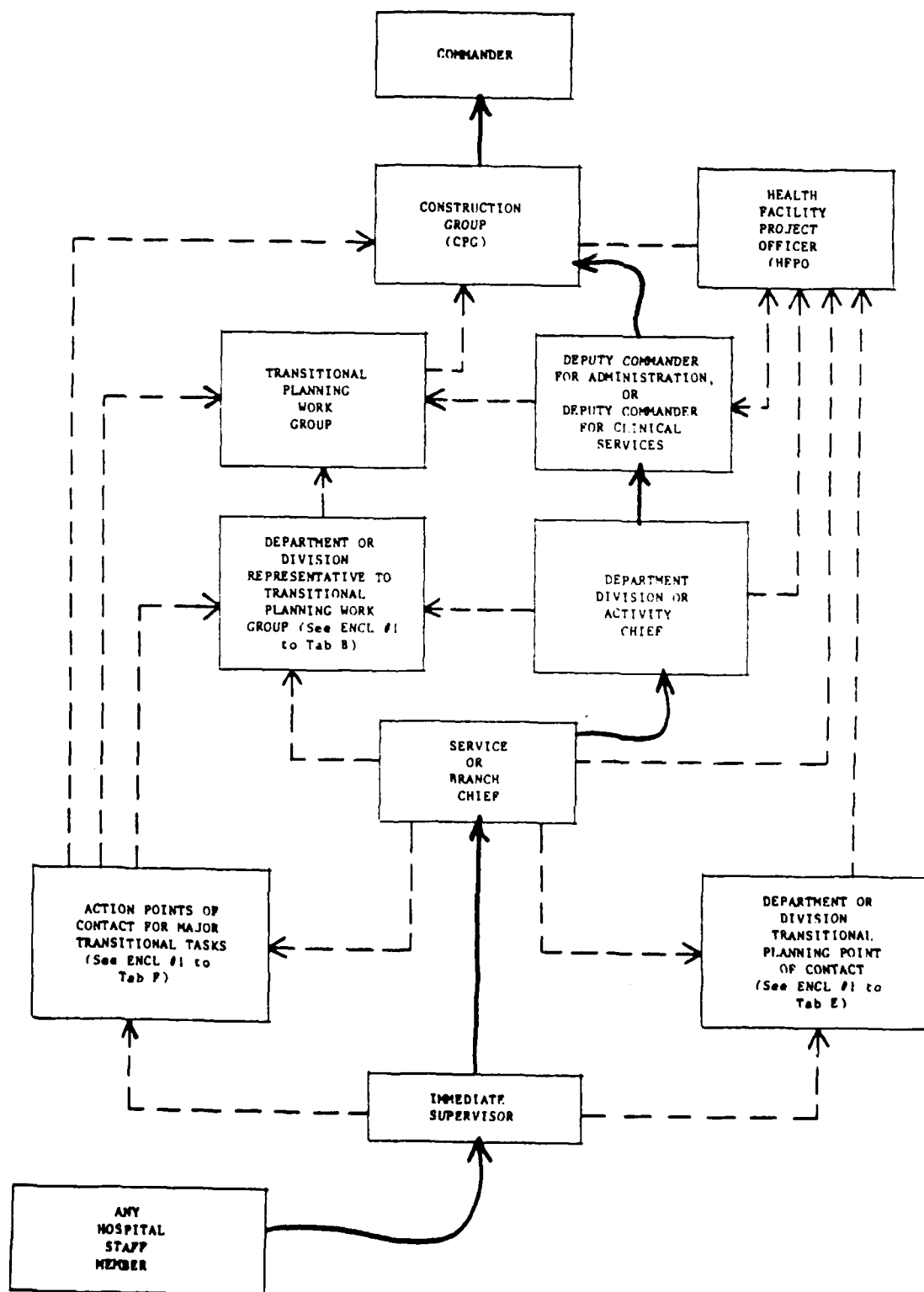
3. In the multidisciplinary and organizationally complex structure of a hospital, the involvement of as many staff members as possible is key to the realization of a successful planning effort. No one individual, or even group of individuals, has the degree of expertise and experience to be cognizant of everything that needs to be done to insure that all hospital elements are fully prepared to occupy and effectively function in the new facility.

4. In this regard, it is essential that all staff members, at all echelons within the hospital, have an understanding as to how issues/problems should be surfaced and passed up the planning chain for review and action. The schematic as attached at Enclosure 1 to this Tab serves to depict how to get issues/problems put into "the system", so that they eventually receive the necessary attention by the appropriate planning entity which will lead to their resolution.

5. The primary approach for raising an issue/problem, as is perceived to impact on either relocation to on operations in the new hospital, would be to bring it to the attention of a staff member's supervisor. It would then be successively routed through those individuals/groups along the primary route as depicted by heavy arrows on the schematic, ultimately surfacing to the Construction Project Group (CPG) for consideration/recommendation and the Commander for decision approval.

6. Dotted arrows at Enclosure 1 depict alternative approaches for surfacing issues/problems, the result being the same in that they would eventually rise to the attention of the CPG for consideration and action.

7. If a staff member perceives an issue/problem to exist, or simply has comments/suggestions which would serve to enhance planning efforts, they should be surfaced. Such input is encouraged and solicited, as everyone else in the organization may have overlooked what is an obvious, and extremely important, planning point.



ENCL 1 TO TAB "



APPENDIX C

NEW MADIGAN PROJECT OFFICE FACT SHEET

SGFP-PM-28

## FACT SHEET

Date: 24 Apr 87  
Office of Origin:  
NMPO/6698

SUBJECT: Madigan Army Medical Center, Ft Lewis, WA

PURPOSE: To provide information about the new Madigan Army Medical Center being constructed at Ft Lewis, Washington.

## DISCUSSION.

1. Project Scope. The new 1.2 million square foot Madigan Army Medical Center will be a 414 bed tertiary care teaching facility. Mobilization expansion capability of 208 beds will provide a total mobilization capacity of 622 beds. The new facility will occupy a 100 acre site and will consist of a nine-story nursing tower, a four-story ancillary support structure, a three-story out-patient clinic, and a one-story logistics building. The project will also include: an ambulance shelter, helipad, medical gas storage facility, roadways, expansion of an existing heating plant, and parking areas for approximately 2,000 vehicles.

2. Design Concept. The new MAMC is designed to fully address the functional needs of the teaching and tertiary care institution and to meet the overall design objectives. The complex is divided into four separate buildings which house different functional occupancies. With the exception of the logistics building, complete interstitial space is provided above each level for building systems, and for future operational flexibility. This interstitial space is dedicated to building utility and transportation systems with no storage or uses permitted other than those activities associated with maintenance and modification of the utility systems.

The buildings are designed to three different occupancy types and are arranged to reflect the intrinsic nature of the use enclosed. The nursing tower is a modular bay structure with compact dual corridor arrangements for efficient work flow, and has windows at residential height. The ancillary support structure has fewer window openings and is developed as an internally-oriented building in keeping with its controlled medical environments. Both of these buildings are designed to meet "health care occupancy" criteria. The logistics building is expressed as the industrial processing warehouse that it is, and is screened from view by earth berms. The logistics building is positioned so that nothing is located above it, and with a complete two-hour fire-rated separation enabling it to be designed to meet "industrial occupancy" criteria. The out-patient clinic has a low massing, resembling a suburban medical office building. The separation from the main hospital is accomplished with two three-story bridge connectors which complete the enclosure of a very attractive courtyard between the two elements. This courtyard will provide a much needed visual amenity that is considered essential because of its functional and environmental advantages. The courtyard will provide needed outside space for hospital and clinic requirements, fresh air intakes, and selective "daylighting" into clinic and ancillary waiting and sub-waiting areas. It also assists in attaining a

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SUBJECT: Madigan Army Medical Center, Ft Lewis, WA

distinct separation of the hospital and clinic elements to enable the clinic element to be designed against "business occupancy" criteria.

The entire complex is thoughtfully sited to take full advantage of the superb natural setting of its new location. Scenic views of Mount Rainier and Puget Sound are recognized as making positive contributions to the healing process, so the facility is oriented toward providing every tower bedroom with a view of one of these features.

### 3. Physical Characteristics.

Gross square feet	1.2 million
Total beds (normal)	414
Total beds (mobilization)	622
Operating rooms	14 (4 for outpatient surgery)
Delivery rooms	4
Bassinets	65
Dental chairs	14
Linear accelerators	3
Simulator room	1
Radiographic rooms	
General radiographic rooms	15 (1 in Orth Clinic)
Fluoroscopic rooms	6 (1 in GI Clinic)
Special procedure rooms	2
Cardiac Catheterization Lab	1 (Adj to Surg Suite)
CT Scan	2
Chest rooms	2
Mammographic rooms	2
Cysto Suites	5 (Urology Clinic)
IVP room	1 (Urology Clinic)

### 4. Special Features.

Bedrooms designed for mobilization expansion  
 1, 2 and 4 bed patient rooms  
 Piped medical gases to each bed  
 Individual color TV's for each patient bed  
 Nurse call system  
 Internal and external pocket paging system  
 Central voice paging system  
 Central music system  
 Electronic private automatic branch exchange  
 Dual broadband coaxial cable system local area network  
 Central dictation system  
 Facsimile system  
 Room status indicator (in clinic building)  
 Drive-up pharmacy  
 Satellite pharmacies on each nursing floor  
 Interstitial space  
 Totally sprinklered facility  
 Engineered smoke control system  
 Fire detection alarm system

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## 5. Materiel Distribution Systems.

a. Automatic Box Conveyor System (ABC). A 47-station system of self-propelled delivery vehicles that automatically transit to and from their destination along a traffic-controlled network of horizontal and vertical tracks. System is to be used to transport medical records, x-rays, and small items of supply.

b. Pneumatic Tube System (PTS). A 51-station computer-controlled, pneumatically-powered system that transports special carriers through a 6" tube. System is to be used to transport messages, small items of supply and other items that physically fit the special carriers and can tolerate this method of transportation.

c. Automatic Transport System (ATS). A fully coordinated and interfaced automated system for transporting clean and soiled materials in carts between processing areas and strategically-located user terminals. These carts will be carried aboard computer-controlled automated vehicles called "transporters" that follow low voltage guide wires embedded in the floors of the cart paths. Vertical movement of these carts will be by seven dedicated elevators while most horizontal movement is through the crawl space. The ATS transporters will have the ability to automatically pick up and drop off carts without human assistance at terminals throughout the system.

d. Pharmacy Point-to-Point Pneumatic Tube. Two dedicated point-to-point pneumatic tube systems within the pharmacy. One is between main outpatient dispensing and satellite dispensing. The other is between satellite dispensing and the drive-up station.

e. Inpatient Pharmacy Lift. An automatic discharge dumbwaiter lift is provided from the inpatient pharmacy to satellite pharmacies located on each patient care floor in the nursing tower for direct movement of pharmaceuticals and supplies between these elements.

f. Equipment Room Dumbwaiter. Two dumbwaiters are provided, one at each end of the tower to move filters, equipment, and spare parts between the crawl space and the tower mechanical rooms on floors 2 through 8.

g. CMS Dumbwaiter. An automatic discharge totebox dumbwaiter for the "stat" movement of small items of supply, individual packs and other goods between CMS and the surgery suite and delivery suite.

h. Case Cart Lift. An automatic load and discharge cart lift to transport surgical case carts from CMS to the surgery suite and delivery suite.

i. ATS Elevators. Seven elevators dedicated to the vertical transportation of the ATS carts. Two each are located in the nursing tower, outpatient clinic building and the ancillary support building, and one in the logistics building.

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SUBJECT: Madigan Army Medical Center, Ft Lewis, WA

## 6. Vertical Transportation (passenger).

a. Elevators. A total of 14 elevators are provided for the movement of people within the facility. The nursing tower contains four patient/staff hospital-size elevators and five passenger elevators for movement of visitors (An additional elevator shaft is provided for a sixth passenger elevator if the tower is expanded at a later date). The ancillary support building contains two hospital-size elevators near the emergency room for movement of patients to the surgical suite, intensive care units, and labor and delivery suites. Three passenger elevators are also provided in the clinic building to accommodate handicapped patients and staff.

b. Escalators. An escalator provides the primary vertical transportation between the three levels of the clinic building.

## 7. Location of Activities by Building and Level:

NURSING TOWER (HEALTH CARE OCCUPANCY)

Ground floor -	Nutritional Care Div Dining Room Inpatient Pharmacy Post Office/mail room	Post Exchange Beauty and Barber Shop Optical Shop Snack bar & Vending Area
First floor -	Patient Services Patient library Chapel & Chaplain offices Main lobby	Patient Administration Patient Assistance Quality Assurance Inpatient Medical Records
Second floor -	Step Down Unit (2S) 20 beds Nursing Service supervisors	Hemodialysis Unit Nephrology Clinic Respiratory Therapy
Third floor -	Obstetrical Unit (3S) 29 beds	Obstetrical Unit (3N) 29 beds
Fourth floor -	Med/Surg Unit (4S) 28 beds	Pediatrics Unit (4N) 32 beds
Fifth floor -	Med/Surg Unit (5S) 28 beds	Psychiatry Unit (5N) 32 beds
Sixth floor -	Med/Surg Unit (6S) 32 beds	Med/Surg Unit (6N) 32 beds
Seventh floor -	Med/Surg Unit (7S) 32 beds	Med/Surg Unit (7N) 32 beds
Eighth floor -	Orthopedics Unit (8S) 30 beds	Orthopedics Unit (8N) 30 beds

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SUBJECT: Madigan Army Medical Center, Ft Lewis, WA

ANCILLARY SUPPORT BUILDING (HEALTH CARE OCCUPANCY)

Ground floor -	Central Materiel Service Laboratory Medical Photography & Illustration	Nuclear Medicine Radiation Therapy Plant Maintenance
First floor -	Blood Donor Center Emergency Room & Acute Minor Illness Clinic	Physical Medicine/PT & OT American Red Cross & Volunteers Radiology
Second floor -	Surgical Suite Ambulatory Surgery Anesthesiology	Dental Clinic Urology Clinic Intensive Care Units (SICU, MICU, CCU)
Third floor -	Labor and Delivery Suite	Nursery

LOGISTICS BUILDING (INDUSTRIAL OCCUPANCY)

Ground floor -	Logistics Clinical Investigations	Energy Plant and Control Center
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OUTPATIENT CLINIC BUILDING (BUSINESS OCCUPANCY)

Ground floor -	Dept of Medicine Allergy/Immunization Clinic Audio Visual Production Auditorium & Conference Room Child Guidance Clinic Dietetics & Clinical Dietetics Dermatology Clinic Hematology/Oncology Clinic Medical Clinic	Automation Management Ofc Medical Specialty Clinic Nursing Education & Staff Dev. OB/GYN Clinic Dir. of Plans, Training & Sec. Preventive Medicine Provost Marshal Psychiatric Clinic Social Work Service
First floor -	Brace Shop Command Suite Comptroller Family Practice Clinic Judge Advocate General Clinic & Nursing Administration	Orthopedic/Podiatry Clinic Outpatient Pharmacy Outpatient Records Pediatric Clinic Public Affairs Office Vending area Veterinary Service
Second floor -	Dept of Surgery Central Appointments Audio/Speech Therapy Cardio/Pulmonary Clinic ENT Clinic Equal Opportunity Office Inspector General	Medical Holding Company Medical Library Optometry/Ophthalmology Cl Dir. of Personnel Surgical Clinic Surgical Specialty Clinic

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SUBJECT: Madigan Army Medical Center, Ft Lewis, WA

## 8. Distribution of Beds by Patient Care Unit

## SECOND FLOOR, ANCILLARY SUPPORT STRUCTURE

Intensive Care Units:Surgical ICU

3 Isolation Rooms	3	
7 Single Bed Rooms	7	
	<u>10</u>	Beds

Medical ICU

3 Isolation Rooms	3	
7 Single Bed Rooms	7	
	<u>10</u>	Beds

Coronary Care Unit

8 Single Bed Rooms	8	Beds
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## SECOND FLOOR, NURSING TOWER

Step-Down Unit (2S)

2 Isolation Rooms	2	
4 Single Bed Rooms	4	(4)
5 Two Bed Rooms	10	(5)
1 Four Bed Room	4	(2)
	<u>20</u>	(11)*

## THIRD FLOOR, NURSING TOWER

Obstetrical Unit (3S)

1 Isolation Rooms	1	
5 Single Bed Rooms	5	(5)
10 Two Bed Rooms	20	(10)
1 Three Bed Room	3	(2)
	<u>29</u>	(17)*

Obstetrical Unit (3N)

2 Isolation Room	2	
4 Single Bedrooms	4	(4)
10 Two Bed Rooms	20	(10)
1 Three Bed Room	3	(2)
	<u>29</u>	(16)*

## FOURTH FLOOR, NURSING TOWER

Medical/Surgical Unit (4S)

2 Isolation Rooms	2	
0 Single Bed Rooms	0	
7 Two Bed Rooms	14	(7)
3 Four Bed Rooms	12	(6)
	<u>28</u>	(13)*

Pediatrics Unit (4N)

3 Isolation Rooms	3	
3 Single Bed Rooms	3	(3)
7 Two Bed Rooms	14	(7)
3 Four Bed Rooms	12	(6)
	<u>32</u>	(16)*

## FIFTH FLOOR, NURSING TOWER

Medical/Surgical Unit (5S)

2 Isolation Rooms	2	
0 Single Bed Rooms	0	
7 Two Bed Rooms	14	(7)
3 Four Bed Rooms	12	(6)
	<u>28</u>	(13)*

Psychiatry Unit (5N)

0 Isolation Rooms	0	
2 Single Bed Rooms	2	(2)
2 Seclusion Rooms	2	
4 Two Bed Rooms	8	(4)
5 Four Bed Rooms	20	(10)
	<u>32</u>	(16)*

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## SIXTH FLOOR NURSING TOWER

Medical/Surgical Unit (6S)

2 Isolation Rooms	2	
6 Single Bed Rooms	6	(6)
8 Two Bed Rooms	16	(8)
2 Four Bed Rooms	8	(4)
	<u>32</u>	<u>(18)*</u>

Medical/Surgical Unit (6N)

2 Isolation Rooms	2	
6 Single Bed Rooms	6	(6)
8 Two Bed Rooms	16	(8)
2 Four Bed Rooms	8	(4)
	<u>32</u>	<u>(18)*</u>

## SEVENTH FLOOR NURSING TOWER

Medical Surgical Unit (7S)

2 Isolation Rooms	2	
6 Single Bed Rooms	6	(6)
8 Two Bed Rooms	16	(8)
2 Four Bed Rooms	8	(4)
	<u>32</u>	<u>(18)*</u>

Medical/Surgical Unit (7N)

2 Isolation Rooms	2	
6 Single Bed Rooms	6	(6)
8 Two Bed Rooms	16	(8)
2 Four Bed Rooms	8	(4)
	<u>32</u>	<u>(18)*</u>

## EIGHTH FLOOR NURSING TOWER

Orthopedics Unit (8S)

2 Isolation Rooms	2	
6 Single Bed Rooms	6	(6)
7 Two Bed Rooms	14	(7)
2 Four Bed Rooms	8	(4)
	<u>30</u>	<u>(17)*</u>

Orthopedics Unit (8N)

2 Isolation Rooms	2	
6 Single Bed Rooms	6	(6)
7 Two Bed Rooms	14	(7)
2 Four Bed Rooms	8	(4)
	<u>30</u>	<u>(17)*</u>

Types of Rooms

		<u>Normal</u>	<u>Operating beds</u>
		<u>Operating Beds</u>	<u>Under Mobilization</u>
Seclusion Rooms	- 2	2 beds	(2)
Isolation Rooms	- 30	30 beds	(30)
Single Bed Rooms	- 76	76 beds	(130)**
Two Bed Rooms	- 96	192 beds	(288)
Three Bed Rooms	- 2	6 beds	(10)
Four Bed Rooms	- 27	108 beds	(162)
		<u>414</u>	<u>(622)</u>

\* Number of expansion beds per unit.

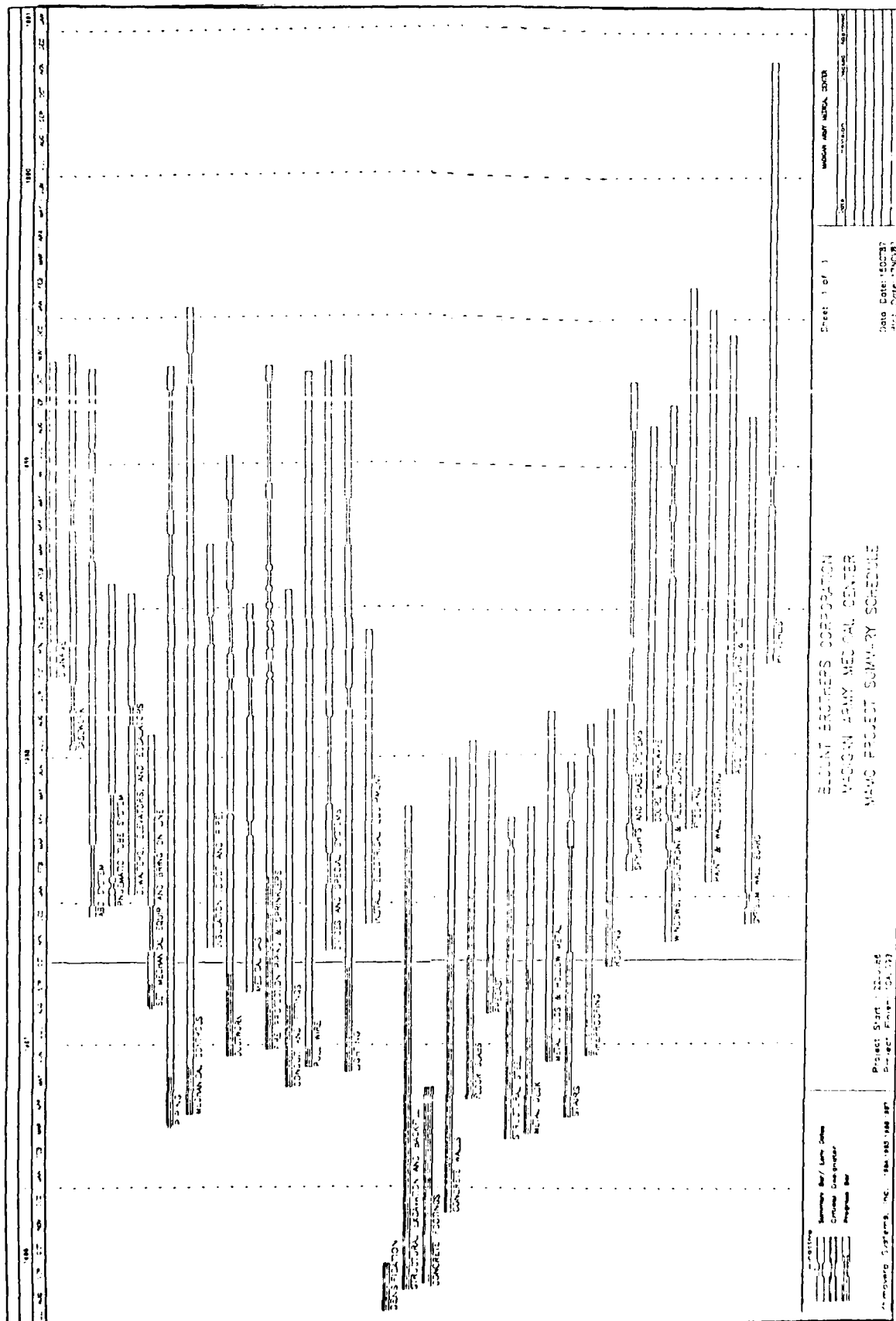
\*\* Twenty two (22) of the single patient rooms are ICU beds that are not expandable.

## BASSINET

Full Term	40	(6 are for observation)
Intermediate Care	8	
Neonatal Intensive Care	15	
Isolation Rooms	2	
TOTAL	<u>65</u>	

COL Martin W. Sargent/967-6698





# PROPOSITION FORM

92

Use of this form, see AR 340-15; the proponent agency is TAGO.

REFERENCE OR OFFICE SYMBOL

SGFP-PM-28

SUBJECT

MAMC Replacement Project -- INFORMATION DF

TO CofS

FROM NMPO

DATE 24 Jun 86

CMT 1

MAJ Simmons/bai/6698

1. Purpose. To provide project information on subject construction and its economic impact on the local community.

2. Information.

a. Project Design Team:

Project Manager: Dept of the Army, Corps of Engineers  
(Contracting Officer: Seattle District)  
Project User: The Office of the Surgeon General  
(Program Manager: US Army Health Facility Planning Agency)  
Architects/Engineer: John Graham Co & Sherlock, Smith & Adams Inc

b. Project Scope:

414 Bed Tertiary Care/Teaching Hospital  
618 Bed capability under mobilization (204 expansion beds)  
9 Floor Nursing Tower  
3 Floor Outpatient Clinic  
4 Floor Associated Ancillary Support Facility  
1 Floor Supply Building  
1.2 Million Gross Square Feet  
\$338,000,000 fully authorized over six fiscal years

c. Project Status:

Initial Site Package: Site preparation, excavating, road construction, relocate utilities, shoppette and Resident Engineer Office.  
Contractor: Pacific Ventures Inc  
Notice to Proceed: 11 Jan 85  
Completion Date: 30 Apr 86  
Construction Cost: \$5,400,000 (\$300,000 in unsettled claims)

d. Main Construction Package: Hospital Construction

Contractor: Blount Brothers Corporation  
Notice to Proceed: 15 Jul 86 (anticipated)  
Projected Completion Date: Nov 90  
Original Contract Price: \$207,756,000 (anticipated)

e. Economic Impact: A Corps of Engineer study indicates that the project will have a positive impact on the community. An estimated 700 to 1000 jobs will be generated in the construction trades. With the existing work force and construction schedule, the total impact is considered insignificant. Manpower, materials and support required locally are considered adequate for the project. Funding projections are as follows:

FY86: \$24,900,000 (appropriation)  
FY87: \$72,000,000 (requested)  
FY88: \$90,000,000 (programmed)  
FY89: \$80,000,000  
FY90: \$60,000,000



JAMES C. SIMMONS

MAJ, MS, Asst C, NMPO

# DISPOSITION FORM

For use of this form, see AR 340-15; the proponent agency is TAGO.

REFERENCE OR OFFICE SYMBOL SGFP-PM-28	SUBJECT MAMC Replacement Project -- INFORMATION DF
TO CofS	FROM NMPO
	DATE 30 Sep 86
	CMT 1 MAJ Simmons/bai/6698

1. Purpose. To provide general information on MAMC replacement project and construction status for the Tri-Service Quarterly Meeting.

2. Information.

a. Project Design Team:

Project Manager: Dept of the Army, Corps of Engineers  
(Contracting Officer: Seattle District)  
Project User: The Office of the Surgeon General  
(Program Manager: US Army Health Facility Planning Agency)  
Architects/Engineer: John Graham Co & Sherlock, Smith & Adams Inc

b. Project Scope:

414 Bed Tertiary Care/Teaching Hospital  
618 Bed capability under mobilization (204 expansion beds)  
9 Floor Nursing Tower  
3 Floor Outpatient Clinic  
4 Floor Associated Ancillary Support Facility  
1 Floor Supply Building  
1.2 Million Gross Square Feet  
\$338,000,000 fully authorized over six fiscal years

c. Project Status:

Initial Site Package: Site preparation, excavating, road construction, relocate utilities, shoppette and Resident Engineer Office.  
Contractor: Pacific Ventures Inc  
Notice to Proceed: 11 Jan 85  
Completion Date: 30 Apr 86  
Construction Cost: \$5,400,000

d. Main Construction Package: Hospital Construction

Contractor: Blount Brothers Corporation  
Notice to Proceed: 22 Jul 86  
Projected Completion Date: 23 Nov 90  
Original Contract Price: \$207,756,000

e. Construction Status: During the first two months of the main construction package for the MAMC replacement project the contractor has mobilized and established operations on the site, completed initial grading and densification operations, and has begun forming and pouring grade beams and mud slabs. Work on the project is 1.4% complete and proceeding on schedule. No problems of significance have been reported to date.

  
JAMES C. SIMMONS

MAJ, MS

Asst C, New Madigan Project Office

APPENDIX D

CONCEPTS OF OPERATION

CONCEPT OF OPERATION  
OB/GYN DEPARTMENT AND CLINIC

MISSION:

OB Outpatient: Evaluation of the outpatient obstetrical patient of all gestational ages for routine care, special obstetrical needs to include, but not limited to, amniocentesis, high risk pregnancy, multiple gestation, non-stress testing, ultrasound testing, and genetic counselling.

GYN Outpatient: Evaluation of the gynecology patient to include; routine gynecology examinations, colposcopy, urodynamic testing, oncology, infertility and screening patients for triage for emergent health problems, biopsies, and special procedures. Active Duty Sick call is held daily prior to seeing appointed patients.

PATIENT FLOW:

All patients will be taken care of in the clinic area. The patients will check into the reception area (G-65-2), those presenting for triage (walk-in GYN problems) will be referred to the Outpatient Records area located on the first floor to obtain their records. OB patients presenting in labor will be given their record and directed to Labor and Delivery, up the elevator, across the bridge connectors, and to the elevator to the third floor. Non-appointed OB patients will be seen on a walk-in basis as necessary.

Patients will be referred to the outpatient lab and outpatient pharmacy (located on 1st floor, directly above OB/GYN clinic) after completion of their appointments.

Patients will be called via the intercom from either the main waiting room (G-65-10) or one of the smaller subwaiting rooms (G-55-13 and G-55-20). At the present time these waiting rooms will be essentially reserved for patients awaiting to be seen in the Colpo Clinic, Ultrasound and Uro-dynamic testing area.

ROOM UTILIZATION:

Room designations would remain the same as indicated except for the following proposals:

Child Care waiting (G-66-10) will be utilized as a conference room/class room.

Exam Rooms #18 and #22 (G-66-1 and G-55-8) will be used as ultrasound rooms.

Resident Office #13 and adjoining exam room #26 (G-55-4 and G-55-3 respectively) will be used for uro-dynamic testing.

Exam Room #21 (G-55-24) will be used as a secure medication room with refrigeration capabilities for culture median and medications.

Treatment rooms G-55-21 and 22 will be exclusively used for colposcopy examinations.

Resident Work Room (G-55-23) will be used for NST testing, hoping that the dimensions of this room will accommodate a minimum of four (4) exam tables.

Nurse Screeners Room (G-64-9) and adjacent exam rooms #33 (G-64-8) and #35 (G-64-10) will be used exclusively for the screening/triage doctor.

Classroom (G-64-4) will be used as an office for the head nurse and the nurse educator.

#### SUPPLIES:

A. CMS: Delivered to clean supply and linen rooms (G-55-1 and G-56-2). Speculums will be distributed to all examination and treatment rooms at time of delivery. During the day speculums will be washed in the "industrial strength" dishwashers which should be installed under the counter in each of the soiled utility rooms (G-54-2 and G-56-3). All other sterile supplies will be stored in the clean supply and linen rooms in cabinets until time of utilization, and will be exchanged on a daily basis one for one.

B. EXPENDABLE: Medical supplies will be stored in the locked medication room proposed, also in the clean supply and linen rooms. Non-medical supplies will be stored in the forms/literature storage room and the two storage rooms located at either end of the main hallway allowing easy access by all personnel.

#### COMMUNICATION:

Overhead paging should be available from all offices and examination rooms, irregardless of utilization. Seperate digit paging should be designated for each waiting area, i.e. Waiting room G-65-9 and 10 paging number 1 and sub-waiting room G-55-13 paging number 2, and sub-waiting room G-55-2- paging number 3. There should also be a paging system that can access all waiting areas and all corridors for general announcements or when trying to locate a physican or patient. All examination rooms, administrative offices, doctors offices, and specialty rooms should have intercom communication.

**HOUSKEEPING:**

Housekeeping can be accomplished daily after closure of the clinic, however, it is desirable, that all toilets used by the general patient population be cleaned a minimum of twice during the clinic day. Preferably once in the mid-morning and again in the mid-afternoon.

**LABORATORY & DISTRIBUTION:**

Most lab specimens will be obtained at the lab since the patient must present there to have the lab work accomplished. Stat lab results can be telephoned back to the clinic on a line that should be reserved exclusively for the lab, either their calling us with results or us calling them for results. It is desirable that all laboratory reports be returned immediately to the clinic upon completion, provided completion is during normal duty hours. This could be accomplished through the pneumatic tube system.

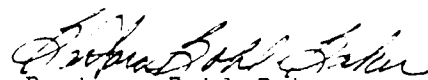
# QUESTIONS/CONCERN

The following are some questions that have come up during our effort to accomplish the concept of operation, and we request assistance in clarification.

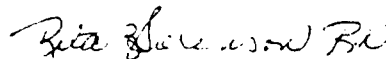
1. Rooms GS-55-22 and 21 what is the drawing along inner wall. Sink/Storage space?
2. What is the space along common wall between G-65-5 and G-65-4?
3. What are the dimensions of the following rooms? G-66-10, G-55-8, G-55-23, G-55-10. Also most exam rooms look about the same size, are they? And what are the dimensions of the average exam room?
4. Do all the toilets have sinks? If so, then what do the little box configurations in each exam room represent? We were under the impression they were sinks.
5. Will stretchers and wheelchairs fit through all exam and treatment rooms with ease? Or, what are the dimensions of the door ways?
6. Are there sinks in the following rooms? G-54-5, and G65-4?
7. Are there patient call buttons to alert hospital staff in all patient toilets?
8. How is contaminated waste disposed of?
9. How are large amounts of records going to be obtained and returned to outpatient records section? As they presently are? Also at present a large "tub" is used to transport the over 2,000 OB patient records between labor and delivery at the close of each business day, however, labor and delivery is adjacent to the OB/GYN clinic. In the new hospital that is no longer going to be the case and so a new system for mass record transfer is either going to have to be devised, or we will be forced to go back to the present way of using a very antiquated technique.
10. How will used supplies be returned to CMS for sterilization?
11. Will pneumatic tube take blood an urine specimens collected in the clinic area to the lab without breakage?
12. What is a room status indicator and how is it used? There needs to be some mechanism available to call nurses to examination rooms and to notify others that the room is occupied. Is the room status indicator capable of this function?



13. What happens when cardiac arrest occurs in clinic? Where will the crash carts be located and will the CA Team come from the ER or the main hospital complex to assist?



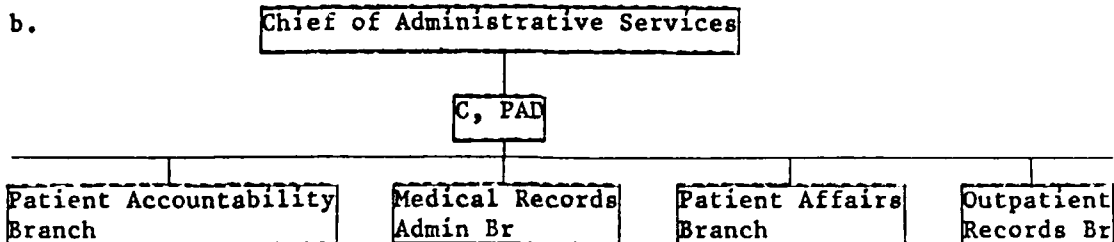
Barbara Bohl-Baker  
Admin Officer  
Department of OB/GYN



Rita Z. Sorenson  
Head Nurse  
OB/GYN Clinic

Patient Administration Division

1. Organizational Elements:
  - a. Office of the Chief
  - b. Patient Affairs Branch
  - c. Patient Accountability Branch
  - d. Medical Records Administration Branch
  - e. Outpatient Records Branch
  
2. Mission:
  - a. Custodian of inpatient and outpatient medical records (1d&e)
  - b. Administration of admission and discharge of patients (1c)
  - c. Administrative transfer of inpatients (1d)
  - d. Collection of medical statistical data (1d)
  - e. Hospital treasure functions (1c)
  - f. Preparation of vital statistic documents and casualty reports (1b)
  - g. CHAMPUS information (1b)
  - h. Medical Board activities (1b&d)
  - i. Initiate third party liability action (1b)
  - j. Supplemental Care and Civilian Claims (1c)
  - k. Medical statements (1d)
  - l. Release of medical information (1d)
  - m. Inpatient and Outpatient dictation (1d)
  
3. Location and Hours of Operation:
  - a. Office of the Chief, 1AA13, 0730-1630 M-F
  - b. Patient Affairs, 1AA019, 1AA21, 0730-1630
  - c. Patient Accountability Branch, 1AA04, 2BK02-Treasurer's Office - 0730-1600 M-F  
Admission and Disposition - 24 hours, 7 da  
Other Sections - 0730-1630 M-F
  - d. Medical Records Administration Branch, 1AA08, 1AA16, 2BK04, 2BF73 - 0730-1630 M-F
  - e. Outpatient Records Branch, 2CX02, 0730-2300 M-F
  
4. Communications:
  - a. Office of the Chief: C, FAD, Asst C, NCOIC, #8386
  - b. Patient Affairs Br: C, #8275
  - c. Patient Accountability Br: C, #8386
  - d. Medical Record Administration Br: C, #8389
  - e. Outpatient Record Branch: C, #8290
  
5. External Dept/Div Interface:
  - a. (1) All administrative and clinical elements of the MEDDAC, (2) individual walk-ins



c. Post - SJA, AG, Law Enforcement Comd, Compt, DENTAC, 326 Med Bn, 86 CSH, CID, IG

d. HSC - PAS&BA, PAD, DCS Prof Actv, IG

6. System supporting Dep/Div: All do to some extent.

7. Significant Changes as a Result of Move:

a. Outpatient Records Branch, (1) Patients will be largely eliminated from transporting records (except TMC). Records will not be given to patients but delivered by outpatient record personnel to clinics or ward and then collected following patient/provider encounter. Pneumatic tube delivery will be used between clinics. (2) Outpatient Records Room and Pediatrics Records Room will be consolidated into one record area. Filing will be in usual terminal digit file system (like colors together) manner rather than by the last digit.

b. Clothing and Baggage Room. There is no clothing and baggage room in the new hospital. Only that which can be placed in the closets on the wards can be accepted. This will cease to be a PAD function thereby complying with AR 40-2.

c. Inpatient Transcription. Instead of the current Lanier head wire dictation system there will be either a Dictaphone or Lanier dictation system using controlled telephone access and having an editing capability. Current memory typewriters will be released to the Outpatient Dictation Section, PAD, and replaced by modern word processing equipment.

d. Treasurer's Office. For those patients without deposited valuables or monies in the Patient Trust Fund, on a trial basis, central PAD clearance will be operated from this point with wards using the pneumatic tube to move the clearance form rather than the patient. On receipt of clearance form, the customary forms will be completed in Treasurer, bill typed and returned to ward for the patient. Treasurer will notify AAD of clearance. On Sat, Sun, and holidays that portion of clearance possible will be accomplished in AAD which will coordinate with Treasurer on next day on those released during that time frame.

e. Pneumatic tube will be used to the maximum for all correspondence and records instead of runners.

f. Outpatient dictation will continue to expand services to providers as training, equipment and resources permit.

g. Inpatient Records will use movable shelves for filing inpatient records rather than current open shelves.

h. To the maximum extent possible, patients will not be given their original medical records to transport to clinics or between clinics. Following a visit to a clinic or hospitalization on a ward the health or outpatient treatment record should not be given to the patient but withheld pending retrieval by outpatient records personnel.

## ADDENDUM TO PAD CONCEPT OF OPERATIONS

8a. Walk-in patients should stop by the Outpatient Records Room before going to the clinic - just as in the old hospital. Normal delivery of the outpatient record will be by PAD personnel to the clinic several times an hour. Delivery of outpatient records from PAD by pneumatic tube will not be the norm but shall also be used depending on numbers and availability of carriers and size of the record as limiting factors. Some thick records will be split between current and old data with only current data forwarded to the clinic unless the entire record is specified (due to size of record the pneumatic tube will accommodate). Only if there is no other way to move the record will it be given to the patient to deliver to the next clinic and then it must be placed in a sealed envelope and next clinic appointment verified. Outpatient records of inpatients will be delivered the day of admission as required when the Outpatient Record Room is notified.

8b. Patient baggage is limited to capacity of closets in patient rooms. There were an average of 4.3 patients per month medevac in to Fort Campbell in FY82. Almost all had a home of record in the local area. Baggage should be picked up by relatives of the patient or by the company to which assigned (first choice), placed with Med Hold Co (it should be noted there is no security currently at Med Hold 2500 area), if necessary, as in any similar hospital (such as Eisenhower), or remain with the patient on the patient care unit (last choice but currently the only alternative unless Med Hold Co capabilities increase.

8c. Patients must come to the Treasurer's Office to pay any balance due on a bill.

8d. There are virtually no changes contemplated in the procedures involved in convalescent leave, patient evac in or out, securing patient valuables, reports from patient care units, death procedures or other vital statistical data. The only normal deviation would be using the pneumatic tube system in some cases to deliver notices or other paperwork instead of the current distribution system or handcarry mode of operation.

There is a modification in admission of a patient in that there will no longer be a requirement for the admissions clerk to provide a 3"x5" patient card or bed card to the patient area to which the patient is assigned. Although the Admissions Office data will reflect assigned patient care unit, the assignment of an actual room to the patient will be accomplished by Dept of Nursing personnel at the patient care unit. Those requiring actual room number of a patient will obtain that data from the patient care unit.

CONCEPT OF OPERATION  
DEPARTMENT OF NURSING

2 November 1982

1. Organizational Elements: Organizational chart identifies Department of Nursing subcomponents and depicts chain-of-command (Attachment 1).

2. Mission: The mission of the Department of Nursing is to provide nursing services as required in the examination, care and treatment of patients in accordance with established standards of nursing practice. Includes hands on nursing services, training and development of nursing staff MEDDAC wide and as directed, assuring quality of nursing care, unit level management of essential hotel functions in the absence of an established non nursing program, supplying the MEDDAC with non prepackaged sterile supplies and monitoring all MEDDAC/DENTAC autoclaving functions, providing career guidance and counseling to military and civilian nursing personnel and managing the day-to-day infection control program (see AR 40-6, AR 40-48, AR 40-66, AR 40-407, DA PAM 40-5, HSC Reg 10-1, FCMEDDAC Reg 10-1).

3. Location and Hours of Operation: Inpatient services to include CMS, emergency nursing care and operative/anesthesia nursing services are provided on a 24 hour daily basis. Supervision is likewise provided 24 hours daily by Assistant Chiefs E/N/Relief. Outpatient, as well as formal educational services are provided during normal duty hours. Once fully developed, Infection Control Quality Assurance programs should operate 24 hours daily as an integral part of the nursing process.

<u>Bldg A, Level 1</u>	<u>ROOM</u>	<u>PHONE</u>
Chief Nurse	1AB57D	8034/5
Assistant Chief Nurse, Days/ Chief Clinical Nursing Svc	1AB57C	8036
Asst C, Evenings & Nights (available after normal duty hours)		
C, Nursing Education & Training Svc	1AB64	8311-5
C, M-S Nursing Section	1AB57B	8037/8
Infection Control/QA Nurse	1AB60	8035
Chief Wardmaster	1AB57A	8039

<u>Bldg B, Level 1</u>	<u>ROOM</u>	<u>PHONE</u>
C, CMS	1BB02	8098

<u>Bldg B, Level 2</u>	<u>ROOM</u>	<u>PHONE</u>
C, Maternal Child Hlth Nsg Sec	2BE15	8210/1
C, OR Nsg Sec	2BD43	8206
C, Anesthesia Nsg Sec	2BD57A	8207/8

<u>Bldg C, Level 2</u>	<u>ROOM</u>	<u>PHONE</u>
C, Clinics/Community Hlth Nsg (Ambulatory Nsg Svc)	2CU08	8148

CONCEPT OF OPERATION  
DEPARTMENT OF NURSING  
 (Continued)

4. Communications: See paragraph 3 for phone numbers of key positions. Clinical and Administrative Services must maximize collaboration/coordination efforts with the office of the chief and the section chiefs. In turn, they must minimize this activity for major programs at the head nurse/wardmaster level thus allowing maximum time for patient care, staff development/orientation readiness preparation, quality assurance programs and collaboration with individual practitioners. Individuals listed in paragraph 3 are available to provide assistance internally and externally. Clinical head nurses deal directly with individual practitioners and ward officers. These individual practitioners, when wearing service and department chief hats, deal more appropriately with individuals in paragraph 3. This is not an effort to decrease communications at the patient care level but rather an effort to simplify communications for head nurses and wardmasters and to assure accomplishment of their primary mission.

5. External Dept/Div Interface: Local, HSC, AMEDDPERSA.

a. Critical Feeder Systems include Personnel and Resource Management Groups, the Comptroller (Budgeting), Logistical Support, Forms and Publications, PAD elements, Food Service, Medical Departments, and such elements as Pathology, Radiology, CSD, Office of CPS.

b. Other MEDDAC elements directly impacting nursing include the American Red Cross, Social Work, Non Clinical Food Service elements, CSD support elements, Unions, the Medical Company, Comptroller. Very little does not impact nursing. In actuality, all activities impact nursing delivery systems to a greater or lesser degree.

c. Chain of supervision depicted in Attachment 1. Medical supervision of patient care occurs at all levels of care and management.

d. Other organizations of daily or frequent importance include but are not limited to the JCAH, IG, and professional organizations.

6. Policy and Procedure:

a. Policy and procedures addressing the role and functions of nursing are the exclusive right of nursing. The Chief, Department of Nursing is the policy making agent for nursing with input from clinical nursing practitioners.

(1) Internal changes: Any policy/procedural change impacting a single patient care unit (PCU) must be coordinated with the clinical section chief responsible for the PCU. Those changes affecting several PCU's or the entire department must be coordinated with Chief, Department of Nursing after acquiring concurrence/nonconcurrences from involved section chiefs.

CONCEPT OF OPERATION  
DEPARTMENT OF NURSING  
 (Continued)

(2) External change requests: Any policy/procedural changes desired by activities external to Department of Nursing must be coordinated with C, DON. Implementing instructions for nursing personnel will be issued by C, DON.

(3) Patient care during peace time and in the event of partial of full mobilization is considered to be the priority mission of nursing personnel. Compliance with standards for advance posting of time schedules requires that all regularly published duty rosters reach the department at least 4 weeks in advance of the starting date on the roster. All communications to staff members regarding personnel requirements, release from duty, additional duties, and mandatory training must be routed through the C, DON for distribution to the individual involved.

7. System's Support of Department: Virtually all hospital systems directly or indirectly impact nursing. The MISO and UCA have thus far provided minimal support in comparison to the potential demonstrated in the civilian world over the past decade.

8. Significant Changes as a Result of Move: The increased clinical space and lack of "closeness" will dilute observational abilities of an already limited staff. Open bays are an advantage where staffing is limited. However, patient and personnel morale should be greatly enhanced by environmental and technical improvements, and steps should be saved by the telephone and pneumatic tube services and the centralized nurse call system. Bed management may be more complex because of male/female mix and competition for private rooms. Advantages and disadvantages should be apparent within the first six weeks of operation. Space will be a problem for areas such as education and training not only for classes but for storage of costly items; but improved AV support will enhance 24 hour capability once programming is improved.

a. Nursing unit staff will determine the bed location for each newly admitted patient based on diagnosis, acuity, and staffing (quantity and quality). Subsequent patient movement within a given nursing unit are at the discretion of the head nurse/charge nurse; the primary physician will be kept informed of plans and needs under non emergent conditions. Appropriate notifications (diet roster, pharmacy, information desk, nurse call system operator) will be made by the nursing unit staff in the event of inter-unit relocations. Based on notification by the head nurse/charge nurse that a nursing unit has reached full occupancy, it is the responsibility of the ward medical officer to take appropriate actions in coordination with other physicians and medical chiefs.



CONCEPT OF OPERATION  
DEPARTMENT OF NURSING  
 (Continued)

b. Nurses in expanded roles, nurses in specialty areas, and individuals performing skills beyond the normal scope of practice are credentialled according to FC MEDDAC Reg 2. Criteria for role/task performance are developed at the unit level and provided as recommendations to the Credentialing Committee which uses these criteria to act on individual requests for credentialing. Credentials are renewed annually. Except for practitioners/midwives credentialing is not yet fully developed. Improvement is a goal.

9. Anticipated Changes Which will be Assisted by Move: To date the Department of Nursing has not implemented the standards of nursing practice first published in 1979 and recently published in DA PAM 40-5. Plans will be developed to implement these standards in an organized and coordinated manner once the move is completed. In turn, the adoption of standards will lead to other changes which can very positively influence patient outcomes but will require multidisciplinary coordination. This change will be facilitated by all efforts to expand patient support services: Unit Dose Delivery Systems, MDS to a great degree though the lack of nurse servers dilutes this advantage somewhat at the hands on level. Unplanned/unscheduled demands also dilute this - unscheduled company/post details, random, non emergent admissions and rounds, non availability of beds, unscheduled meetings, true emergencies, unscheduled administrative demands.

10. Narrative: By all indications the operation of the Department of Nursing's inpatient services was not slated to change as a result of the move. This means the department would conceptually operate within a functional (task oriented) organization or at best a functional-team approach. This approach was adopted during WWII as a field expedient approach to saving lives, but its popularity waned during the late 50's and 60's. Team and primary nursing have been popular during the 60's and 70's and have been adopted with varying levels of success in military hospitals. It is unusual today to receive a nurse under 40 or a physician who can even conceive of other than team or primary nursing as a means for organizing the delivery of nursing services. Pure primary nursing is difficult in the AMEDD because of our large numbers of paraprofessional nursing staff, but team or pri-team nursing is possible, highly palatable, and of critical importance to improving patient outcomes and retaining costly resources.

a. Operative/Anesthesia Service write-up from LTC Crist and LTC Couch.

b. Visiting hours as described in the Patient Information Book will be in effect unless health care providers elect to limit visitors to selected patients in order to promote rest and recovery. Families of surgical patients should wait in the waiting area outside the OR while

CONCEPT OF OPERATION  
DEPARTMENT OF NURSING  
(Continued)

the family member is in surgery to facilitate physician-family communication.

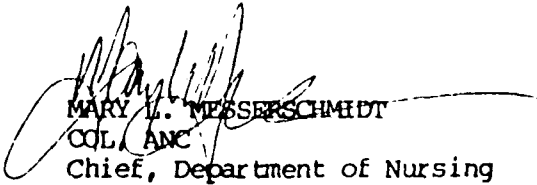
c. Infection control description from MAJ D. Kading.

d. Department of Nursing will strive to maintain annual CPR Certification for 99% of its members and participation in the CPR training program is open to all MEDDAC staff on a space available basis. Further, the department will support and implement those decisions made by the Critical Care Committee regarding the location and inventory of emergency equipment and procedures for managing medical emergencies, and certification and training requirements.

e. The Department of Nursing is committed to modernizing nursing's delivery systems. Once the move and initial shakedown is completed, plans will be developed to introduce the standards of nursing practice. Commensurate with this implementation, alternative organizational approaches will be explored and changes appropriate for this MTF will be programmed. All disciplines should expect an increase in requests to provide input to multidisciplinary patient conferences and discharge planning activities and clinical and administrative consultation.

f. In addition to nursing's organization for care, personnel will explore modernization of nursing's management systems--information handling as well as such elements as patient acuity and flexible staffing. The JCAH requires that a patient acuity system provide the basis for staffing ratios. Such systems do exist but few MTF's have access to them, yet. We will also pursue electronic means for handling information on the broad scale and improved methods for storing information at the user level.

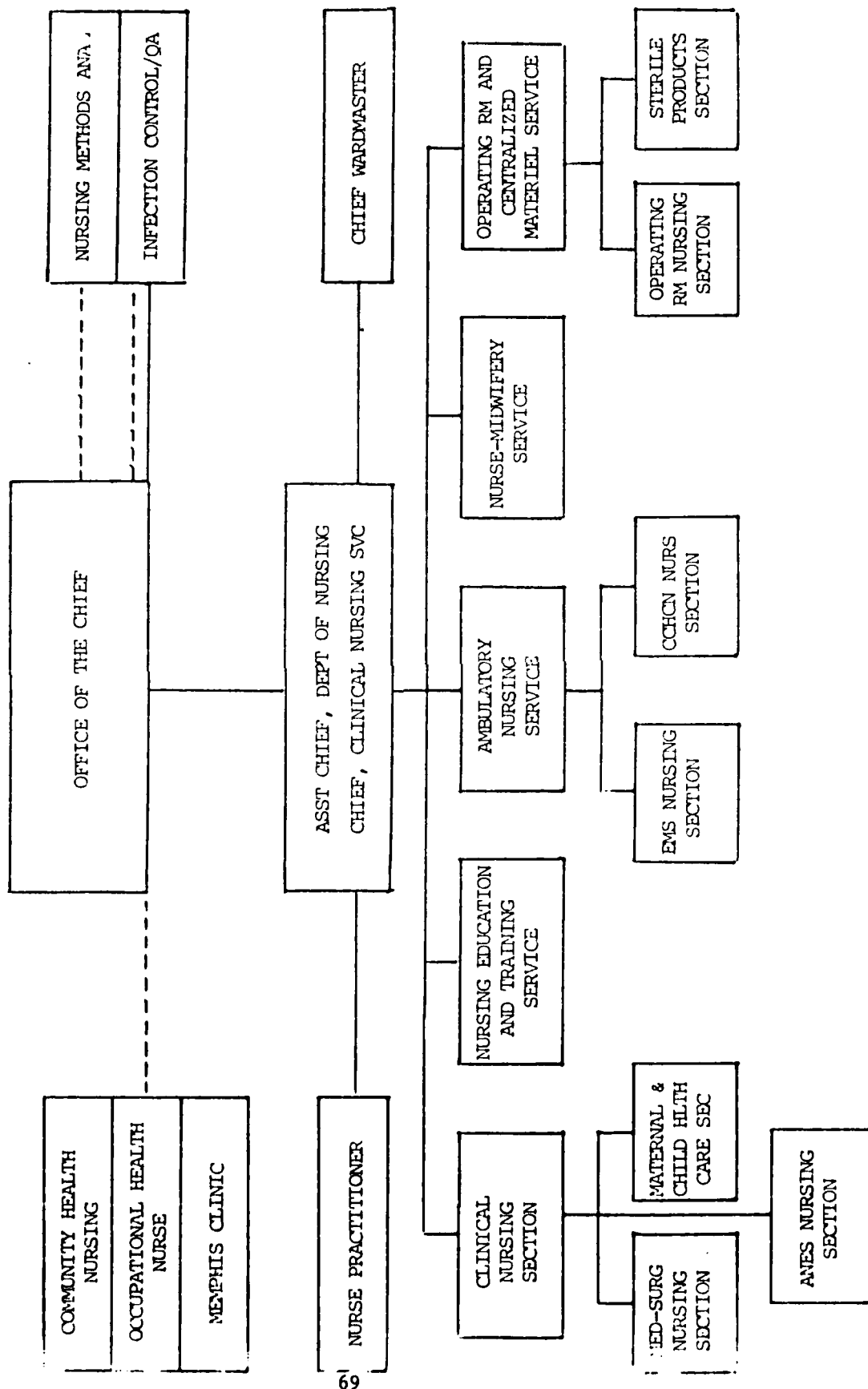
g. As a minimum, all disciplines should anticipate that nursing will organize under an advanced, patient focused team concept, that by early 1984 the standards of practice will be fully implemented and that elements of change will be evident beginning in early 1983. Coordination will be maximized among the various disciplines to facilitate critically needed changes.

  
MARY L. MESSERSCHMIDT

COL, ANC

Chief, Department of Nursing

# DEPARTMENT OF NURSING



APPENDIX E

REORGANIZATION OF CLINICS

## D \* R \* A \* F \* T

## REORGANIZATION OF CLINICS

**PRESENT SITUATION:** In the present facility, individual clinics have separate TDA paragraphs, separate requirements for administrative and clerical support, and separate requirements for nursing supervisory personnel in support of operations. They are each housed in a separate building because of the physical configuration of this cantonment-type facility. This situation lends itself to isolation of requirements in support of each service because of distance from others and because of different hours of operations of separate functions.

**NEW FACILITY:** In the new hospital, different arrangements of services will bring about different relationships and will provide an opportunity for realignment of resources to accomplish the mission more efficiently. An example is the medical clinic in the new hospital. According to the design, it will accommodate several services which are presently autonomous. A review of this clinic design indicates that it was planned for six services, with 6 Chief's offices plus 29 other doctor's offices and a total of 55 exam rooms. It has administrative space for 3 nurse's offices, 2 NCOIC's offices, 3 reception counters with space for 5 persons, 2 secretary's offices, and 4 administrative offices.

In this combination clinic, there are 15 procedure rooms for proctoscopy, endoscopy, fluoroscopy, and other procedures. There are also 4 subwaiting areas. The design intent is for these services which occupy this space to share common areas such as lounges, locker rooms, conference rooms, litter/wheelchair storage space, clean and soiled supply rooms, and general waiting areas.

Taken one step further, the occupants are expected to share services such as receptionists and secretaries and the logistical and hotel functions of managing these clinics.

A review of the TDA (8610, paras 201, 202, 202C, 204, 205, 206, 209A, and 212) shows that there are a total of 34 physicians required and 33 authorized for these services. There is adequate space for them.

Each service has the senior enlisted person acting as NCOIC to perform administrative functions, and subsequently asked for an office for 7 NCOIC's. There are no NCOIC's on the TDA. Five offices must be subtracted from either the total number of doctor's offices or exam rooms to accommodate this requirement.

There is a requirement for 4 RN's, and authorization for 3, and since there are 3 offices on the plans, this requirement can be easily met. However, is there now a requirement for 3 RN's, considering a consolidation of services in one physical location?

This group of services has requirements for the following in secretarial/clerical support:

SUPV SEC STENO	1	1
SECTY TYP	3	3
MED CT	14	8
CT	1	0
	<u>19</u>	<u>12</u>

Even though space is programmed for 7 personnel, do they really need all this number or can support services be consolidated?

REORGANIZATION: Review of this one clinic shows that a reorganization from separate identities to one individual clinic would have several benefits.

1. A reduction in the number of administrative personnel required to perform administrative and hotel functions. For those services which have specialists in a particular specialty (Derm, Allergy), the person would be free to provide patient services or support of medical procedures instead of administrative duties.
2. A reduction in, and clarification of duties, of clerical and secretarial staff. Since there are no secretaries for in-patient requirements (medical clerks are on the units) is there a requirement for this support function to be accomplished in the parent clinic?
3. With the existence of new systems to provide efficient support to the hospital, some functions formerly ascribed to the NOO will need to be centralized. For example, the Material Distribution System (ATS cart lift and all that implies) will virtually eliminate the need for inventory management (ordering, receiving, storing, and maintaining an inventory). Some participative activities must be maintained, such as negotiating stock levels and accountability methods, but they are far less time consuming.
4. With centralization of supplies, it will become easier to centralize equipment requirements also. In a clinic of this size, centralizing equipment requirements would result in a better use of the equipment, better control, and better budgetary planning. It also requires a different approach to hand-receipting.
5. With centralization, territorial imperatives are reduced, and the global efforts are directed to Departmental objectives. It is simpler to be objective about issues which are justified in relationship to other demands.
6. Planning efforts are enhanced, using resources previously not available because of physical or service boundaries. For example, secretarial and clerical support can be re-directed to cover fluctuating demands without exhausting funding resources. In other words, you can use what you have to a greater extent instead of buying more. It also reduces redundant operations. For example, if 6 people produce workload figures for 6 clerical persons to convert to formal documents, it would be possible for all six sets of input to go to one person for a workload document.
7. Information processing is simplified when there is a reduction in the numbers of personnel required to give or receive information. Guidance on departmental requirements for input to a planning function would be reduced if one person were responsible for administrative support of this clinic.
8. Accountability and communications are improved immediately upon centralization of responsibility. The individual is identified, and everyone knows who is responsible. Demands on the system are simplified if one has only to contact a single individual for an action. Response time is faster.

ARCHITECTURAL FEATURES WHICH MUST BE CONSIDERED AS DESIGN INTENT FOR ONE FUNCTIONAL CLINIC:

1. Three reception areas.
  - A. Dermatology, Rheumatology, Endocrinology
  - B. Internal Medicine, Infectious Disease
  - C. Gastroenterology, Allergy/Immunization
2. Telephone System. Phones will be answered by receptionists for all clinics.
3. Automatic Box Conveyor (ABC). There are only two ABC units to support this entire clinic block.
4. Automatic Transport System (ATS). There is one central area that supports this clinic as well as supporting others outside of the area. The entire centralized supply concept must be considered as a major factor.
5. Local zone paging system. This only supports the central clinic concept.

CONCLUSION:

This clinic in the new hospital does not have physical boundaries to separate the services from each other. There are common use areas. There is no space programmed to treat the services as separate identities with multiple support elements. It is one major clinic with a variety of services available within it, and it will operate efficiently only if treated as such.

APPENDIX F

EQUIPMENT REQUIREMENTS PLANNING GUIDE



# DISPOSITION FORM

115

For use of this form, see AR 340-15; the proponent agency is TAGO.

REFERENCE OR OFFICE SYMBOL

SUBJECT

SGFP-PX-28

Initial Equipment Requirements List

TO FROM NMPO DATE 3 Sep 86 CMT 1  
COL Fletcher/bai/6698

1. The determination of equipment requirements associated with a major MCA medical project presents a significant challenge and is a critical aspect of planning for the transition to the new facility. This is a major effort which must be started before construction begins in order to ensure that sufficient funds for equipment are allocated and that acquisition action will not be delayed which could cause construction deadlines to be missed.
2. Attached is your activity's copy of the Equipment Requirements Planning Guide (ERPG) which lists the total equipment requirements anticipated for the new facility. The ERPG is a planning document, a starting point for identification of equipment requirements and the initiation of MEDCASE Program Requirements (MPR's).
3. Your task is to review the attached list carefully, using both your user plans and concepts of operation. Ensure that all the listed rooms are in your area of responsibility, and also that all rooms which belong to you are listed. In addition, you must accomplish the following:
  - a. Title of Room - Write in title if different from listing. Example: Administrative Office may be changed to Administrative Assistant, Dept of X.
  - b. Review each room's equipment list, deleting those items which you do not feel are required. Add those items which you consider necessary for operations, those you expect to see in place in the new facility.
    - (1) Do not worry about JSN #'s. This office will assign those for you.
    - (2) You may not change LOGCAT A, B, E, F items. If you disagree with any of these items, call the Project Office.
4. Revised Equipment Lists are due back to this office NLT \_\_\_\_\_. Once these are returned to us, they will be reviewed and the master equipment list will be updated to reflect your revised requirements. Once this is accomplished, you will be provided with updated room lists. Procedures for making changes to this list in the future will be provided to you within the next few months.
5. If you have any questions or problems with your list, please call COL Fletcher or Mr. Morcom at ext 6698.

Atch

  
MARTIN W. SARGENT

LTC, MS

C, New Madigan Project Office

# DISPOSITION FORM

116

For use of this form, see AR 340-15; the proponent agency is TAGO.

REFERENCE OR OFFICE SYMBOL

SUBJECT

SGFP-PM-28

Room and Equipment Lists for New MAMC

TO

FROM

DATE

CMT 1

C, New Madigan Project  
Office

9 Sep 87

COL Sargent/df/4166

1. Attached is your activity's copy of the Equipment Requirements Planning Guide (ERPG), which lists the total equipment requirements anticipated for the new facility. It is a planning document, a starting point for identification of equipment requirements and the initiation of MEDCASE Program Requirements (MPR's). In addition, you are provided a list of rooms for your activity.

2. Your task is to review the room list carefully, using the user plans and agreements resulting from our meetings with your activity. Ensure that the rooms listed are in your area of responsibility, and that none of your rooms have been omitted. Room titles should be changed to reflect desired identification. In addition, you must accomplish the following:

a. Correct titles of room. Write in the title if different from listing.

b. Review equipment list for each room. Delete those items you do not feel are required for the function of the room, and add those which you consider necessary, those you expect to see in place in the new facility.


(1) Do not worry about JSN #'s. This office will assign them for you.

(2) Do not change LOGCAT A, B, E, F items. If you disagree with any of these items, call the Project Office.

3. Both the revised equipment list and the room list are due back to this office NLT \_\_\_\_\_. Once these are returned to us, they will be reviewed and the master equipment list will be updated to reflect your revised requirements. You will then be provided an updated list. Procedures for making changes in this list in the future will be provided to you within the next few months.

4. If you have any questions or problems with your list, please call COL Fletcher or Mr. Morcom at 7-4166, ext 142.

2 atch

  
MARTIN W. SARGENT  
COL, MS  
C, NMPO



DEPARTMENT OF THE ARMY  
MADIGAN ARMY MEDICAL CENTER  
TACOMA, WASHINGTON 98431-5000

REPLY TO  
ATTENTION OF

HSJH-CG (340)

25 January 1988

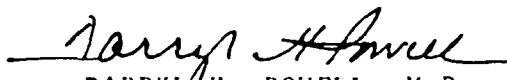
MEMORANDUM FOR: Department/Division/Service Chiefs and Special Staff, Madigan Army Medical Center, Tacoma, Washington 98431-5000

SUBJECT: Transition to New Madigan Army Medical Center

1. Over the next several months, representatives from the New Madigan Army Project Office and Property Management will contact departments chiefs or designated points of contact (POCs) for the purpose of reconciling hand receipt items with equipment requirements in the new facility. At this time, equipment lists will be updated and further guidance provided for procurement of needed items for the new facility. I expect your utmost cooperation in coordinating your schedules to accomplish these objectives in a timely manner.

2. I call your attention to the fact that we are entering the transition period; the final period of planning and preparation before actual occupancy. This is the time when coordination, cooperation and attention to suspense dates are of vital importance to a smooth, organized transition; a time when inaction can have significant adverse and costly impact.

3. As you become actively involved in the transitional efforts, remember that irrespective of your assignment at the time of actual relocation, your contributions now will have long term implications on the delivery of health care in the new facility. Your cooperation is vital to the completion of this project.

  
DARRYL H. POWELL, M.D.  
Brigadier General, MC  
Commanding

DISTRIBUTION:

F

# DISPOSITION FORM

118

For use of this form, see AR 340-15; the proponent agency is TAGO.

REFERENCE OR OFFICE SYMBOL

SUBJECT

SGFP-PM-28

Reconciled Equipment Lists

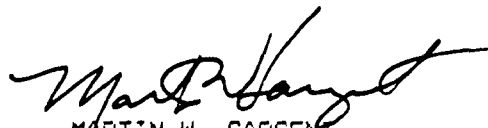
TO Logistics Division  
ATTN: Medcase Manager

FROM C, NMFO

DATE 12 May 1988 CMT 1  
COL Fletcher/df/6699

1. Attached is the reconciled equipment list for JAG. Surgical Clinic and Medical Library for delivery to the point of contact. This list includes the MMCN numbers of the Relocatable items.
2. Following each activity is a reconciliation page which shows total quantities of each item.

Atch

  
MARTIN W. SARGENT  
COL, MS  
C, NMFO

PAGE NO. 39  
05/04/88

MADIGAN ARMY MEDICAL CENTER  
EQUIPMENT MANAGEMENT SYSTEM

EQUIPMENT LIST RECONCILIATION

ACTIVITY: SURGICAL CLINIC

RECONCILIATION PAGE NO. 1

JSN	ITEM DESCRIPTION	QTY	LOG CAT
C02Q0	CABINET, UNDER SINK BASE	5	A
C04J0	CABINET, UNDER COUNTER BASE	5	A
C04L0	CABINET, UNDER COUNTER BASE	5	A
CE040	CABINET, WALL HUNG GLAZE DCOR	10	A
CS070	SINK, COUNTER. 10X20X15	5	A
CT030	COUNTER TOP, 24" DEEP	5	A
M1310	BENCH, LOCKER ROOM	6	A
M1990	CABINET, COMBINATION W/SHELF	3	A
M3620	DISPENSER, PAPER TOWEL, WALL	5	A
M3700	DISPOSER, FEMININE NAPKIN	3	A
M4601	GRAB BAR, 1 1/2" BENT	3	A
M4740	LIGHT, EXAM & TREATMENT	1	A
M4770	LIGHT, SURGICAL CEILING MOUNTED	4	A
M5300	MIRROR GLASS, STAINLESS	6	A
M5960	HOOK, ROBE, 2 PRONG	24	A
M7960	TRACK, CUBICLE CURTAIN	2	A
M7970	HOLDER, TOILET PAPER RECESSED	3	A
M8000	TRACK, I.V. LOOP 4 X 7 FT	2	A
P3000	LAVATORY	3	A
P4000	LAVATORY, CONSOLE UNIT, CRS	14	A
P6950	SINK, SURGEON'S SCRUB UP	2	A
P9050	WATER CLOSET	3	A

MADIGAN ARMY MEDICAL CENTER  
EQUIPMENT MANAGEMENT SYSTEM

EQUIPMENT LIST RECONCILIATION

ACTIVITY: SURGICAL CLINIC

RECONCILIATION PAGE NO. 2

JSN	ITEM DESCRIPTION	QTY	LOG CAT
M4001	TRANSFORMER UNIT, OTC/OPTH	11	B
M4450	SPHYGMOMANOMETER, MERCURIAL WALL	11	B
A0170	CABINET, ENDOSCOPE STORAGE 8X2X12"	1	C
A0171	LIGHT SOURCE, ENDOSCOPIC	3	C
F0293	COLONOSCOPE	4	C
F0418	ENDOSCOPE	3	C
F2936	SIGMOIDOSCOPE, FIBEROP., ADULT	3	C
F0214	CABINET, BEDSIDE	2	P
F0233	CARRIAGE, WITH STAINLESS STEEL PAIL	2	P
F0521	FLOWMETER, OXYGEN 1-15 LITERS	1	P
F0706	HAMPER, SOILED LINEN	6	P
F1602	STOOL, SURGEON'S REVOLVING	10	P
F1816	STAND, MAYO	6	P
F1901	THERMOMETER, ELECTRIC	1	P
F1934	TYPEWRITER, ELECTRIC	3	P
F1940	TABLE, PROCTOSCOPE	2	P
F1942	TABLE, TREATMENT	1	P
F3011	VACUUM, REGULATOR & BOTTLE	1	P
F4001	WASTE RECEPTACLE, STEP-ON	11	P
F4011	WASTE RECEPTACLE, METAL	18	P
M0100	ADP TERMINAL	1	P
M1860A	BULLETIN BOARD, 48 X 48	0	P

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05/04/88

MADIGAN ARMY MEDICAL CENTER  
EQUIPMENT MANAGEMENT SYSTEM

EQUIPMENT LIST RECONCILIATION

ACTIVITY: SURGICAL CLINIC

RECONCILIATION PAGE NO. 3

JSN	ITEM DESCRIPTION	QTY	LOG CAT
M1950	CABINET, EXAM ROOM	6	P
M2600	CABINET, SURGICAL INSTRUMENT	1	P
M3051	DEFIBRILLATOR. W/CART	2	P
M3160	CLOCK, ROUND 12 IN DIAMETER	24	P
M4700	LIGHT, MULTI-PURPOSE, EXAM	6	P
M5060	STAND, IRRIGATOR (I.V.)	1	P
M7100	TABLE, EXAM TREATMENT, CABINET	2	P
M7380	TABLE, EXAM PEDESTAL TYPE	2	P
M7400	TABLE, SURGICAL INST/DRESS	8	P
M8330	STRETCHER, HOSPITAL, WHEELED	2	P
X3930	ILLUMINATOR, 2 PANEL SURFACE	11	P
X3990	ILLUMINATOR, 4 PANEL SURFACE	10	P
A0171	LIGHT SOURCE, ENDOSCOPIC	1	R
E1130	WORK STATION, MODULAR CLINICAL	1	R
F0041	TRANSFORMER, W/6 FT CORD	1	R
F0123	COMPUTER, CONTROLLER, GRAPHIC INPUT	1	R
F1116	LIGHT, OPERATING/EXAM FIBEROPTIC	6	R
F1565A	PROCTOSIGMOIDOSCOPE, FLEXIBLE	1	R
F1837	APPARATUS, SUCTION	1	R
F1837B	APPARATUS, SUCTION, PORTABLE	1	R
F1934	TYPEWRITER, ELECTRIC	1	R
F1940	TABLE, PROCTOSCOPE	1	R

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MADIGAN ARMY MEDICAL CENTER  
EQUIPMENT MANAGEMENT SYSTEM

EQUIPMENT LIST RECONCILIATION

ACTIVITY: SURGICAL CLINIC

RECONCILIATION PAGE NO. 4

JSN	ITEM DESCRIPTION	QTY	LOG CAT
F1942	TABLE, TREATMENT	1	R
F2938	LIGHT SOURCE, FIBEROPTICS	1	R
F7054	COMPUTER, CONSOLE UNIT	2	R
F7054A	COMPUTER, MONITOR	2	R
F7054C	COMPUTER, KEYBOARD	1	R
F7054F	COMPUTER, TAPE BACK-UP	1	R
F7054G	COMPUTER, FLOPPY CONTROLLER	1	R
F7062D	COMPUTER PRINTER, COVER ACOUSTICAL	1	R
F7062E	COMPUTER PRINTER, SINGLE SHEET FEED	1	R
F7062H	COMPUTER PRINTER, PLOTTER	1	R
F7062K	COMPUTER PRINTER, LETTER QUALITY	1	R
M0100F	ADP - NCR KEYBOARD	1	R
M0351	CART, CRASH	1	R
M2200	CABINET, MEDICINE COMBINATION	2	R
M2600	CABINET, SURGICAL INSTRUMENT	2	R
M5770	ELECTROSURGICAL APPARATUS	1	R
M7100	TABLE, EXAM TREATMENT, CABINET	4	R
M7400	TABLE, SURGICAL INST/DRESS	1	R
M7605	SOURCE, LIGHT, FIBEROPTIC	4	R
M7610	SIGMOIDOSCOPE, FIBEROPTIC, ADULT	4	R
M8160	SCALE, PERSON WEIGHING	1	R
A0069	CURTAIN, CUBICLE	1	Z



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05/04/88

MADIGAN ARMY MEDICAL CENTER  
EQUIPMENT MANAGEMENT SYSTEM

EQUIPMENT LIST RECONCILIATION

ACTIVITY: SURGICAL CLINIC

RECONCILIATION PAGE NO. 5

JSN	ITEM DESCRIPTION	QTY	LOG	CAT
E1130	WORK STATION, MODULAR CLINICAL	4	Z	
E1150	WORK STATION, MODULAR CLINICAL	7	Z	
E2000	TABLE, TYPING, MOBILE	1	Z	
F0115	BOOKCASE, SECTIONAL, 35 X 14 72	19	Z	
F0200	CHAIR, WAITING ROOM	5	Z	
F0202	CHAIR, ROTARY, W/D ARMS, TYPING	6	Z	
F0228	CHAIR, ROTARY W/ARMS	1	Z	
F0232	CABINET, FILING	15	Z	
F0242	CREDENZA	1	Z	
F0252	CHAIR, PATIENT, VISITOR	2	Z	
F0256	CHAIR, ROTARY WITH ARMS	13	Z	
F0257	CHAIR, SECRETARIAL	3	Z	
F0259	CHAIR, SIDE	12	Z	
F0264	CHAIR, ARM	7	Z	
F0307	DRAPEE	5	Z	
F0334	DESK, DOUBLE PEDESTAL	4	Z	
F0356	DESK, SECRETARIAL, W/L-UNIT	3	Z	
F0360	DESK, DOCTORS WORK STATION	9	Z	
F0620	GRAPHICS (PICTURES)	12	Z	
F1701	RACK, HAT AND COAT	1	Z	
F1900	TABLE, WAITING ROOM	2	Z	
F1915	TABLE, END, 24 X 24	4	Z	

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03/04/88

MADIGAN ARMY MEDICAL CENTER  
EQUIPMENT MANAGEMENT SYSTEM

EQUIPMENT LIST RECONCILIATION

ACTIVITY: SURGICAL CLINIC

RECONCILIATION PAGE NO. 6

JSN	ITEM DESCRIPTION	QTY	LOG CAT
F7031	CABINET, FILE LATERAL 5 DRAWER	5	Z
F9302	CHAIR, ROTARY, W/O ARMS	1	Z

Co FY

# DISPOSITION FORM

For use of this form, see AR 340-15, the Disposition Agency is TAGO.

REFERENCE OR OFFICE SYMBOL

SUBJECT

HSNJ-LOP (700)

Submission of MEDCASZ MPR's and MSTF's for the NMHP

XX THRU: C, Dept of Surgery  
TO: Surgical Clinic

FROM C, Property Mgmt Br

DATE 18 May 1988

CMT 1

Mrs. Spring/ss/76698

Att'n: COL Anderson

1. Attached is your corrected copy of the room and equipment list for your area of responsibility in the new Madison Army Medical Center. This list reflects all previously agreed upon changes, your requirements by room in the new facility, and the number of items you expect to relocate to the new facility.

2. Your concern at this time is solely with the LOGCAT C items on your list for which you must submit MPR's and MSTF's within the next six weeks. A suspense date of N/A has been established for submission of all MPR's and MSTF's from your activity to MEDCASZ.

### 3. Instructions:

a. Items with which you are concerned are those LOGCAT C items which do not have matching assets. If all your LOGCAT C items have matching assets, you do not have to submit MPR's and MSTF's. If you have no LOGCAT C items at all, you do not have to submit MPR's and MSTF's. If, however, you have requirements which are not matched by assets, you must submit MPR's and MSTF's for them.

b. Complete MPR (DA Form 3027, Medical Program Requirements) and MSTF (DA Form 3028, MEDCASZ Support and Transmittal Form) for:

(1) every non-expendable medical item with a unit price of \$200.00 or more

(2) and every non-medical item with a unit price of \$30.00 or more.

c. You must fully support and justify these items through the MEDCASZ approval process as written in MAMC Memorandum 700-5, dated 24 Sep 87, and SB 8-75 MEDCASZ dated 6 Jun 86. Write clear justifications and follow instructions given in these references to ensure orderly processing and prevention of administrative problems.

d. Each MPR must have the Room Number in the new hospital where the item of equipment will be located, and the JSN number to identify it with the data base. Place this information in the "J" Remarks section.

e. All item costs should be listed at the current market value plus ten percent. (Since the item will not be bought for a period of 2 to 4 years, an inflation figure must be included to project cost growth.) Do not use GSA prices.

4. Questions regarding the data base may be directed to the NMPO, COL Fletcher or CMC Morcom 7-6699. Questions regarding MEDCASZ may be directed to Mr William Victory at 7-6698.

Encls  
as

*William M McCandless*  
WILLIAM M. MCCANDLESS  
CPT, MS  
Chief, Property Management Branch

## PREPARATION OF JUSTIFICATION FOR MEDCASE PROGRAM REQUIREMENTS

**Justification of Requirements.** Adequate clinical, logistical, or economic justification for MEDCASE requirements is absolutely essential to the integrity of the MEDCASE program. All MPR's will be justified. Justification is normally the responsibility of every individual who signs an MPR/MSTF to evaluate and, if appropriate, to question the justification provided.

A. Justification must be entered in the appropriate spaces on the MPR. Continuation sheets may be used where necessary, provided there is a clear reference to the block being continued. It is not acceptable to leave a justification block on an MPR blank with a reference to "see attached sheet". Justifications should be concise.

B. A justification should state the minimum essential characteristics of the item requested and provide a clinical or functional reason for each.

C. Justification shall be supported by facts. General statements such as, "...required to meet an increase in workload" will not be accepted unless the actual increase in workload is quantified and explained. Justifications which cite maintenance problems experienced with existing equipment must be supported by documentation of those maintenance problems. Such documentation is provided by the Equipment Maintenance Activity and must accompany the MPR/MSTF through the review and approval process.

D. Justifications shall relate the capabilities requested to the actual requirements of the activity. A requirement justification which explains in great detail the technological advantages of a type of equipment shall not be accepted unless the activity's need for those advantages is explained. The phrase "state-of-the-art", while descriptive, adds very little to a requirement justification unless the specific "state-of-the-art" capabilities and the need for those capabilities are described. Justifications must not repeat or paraphrase manufacturer's literature.

E. The Justification Block on the MPR prompts the initiator to answer specific questions regarding the requirement. These questions should be clearly and concisely responded to. In addition, the initiator should ensure that the justification adequately addresses the following questions/areas:

- (1) What is the item requested to be used for? Why is the item needed?
- (2) How will the item be used with other equipment?
- (3) What are the advantages of the requested item over equipment currently in use or available on the market? Why are these advantages needed?
- (4) Have specific details been presented regarding cost-benefit, personnel savings or productivity, the enhancement or curtailment of services, frequency or duration of breakdown, or other specific facts which may be relevant?
- (5) What will be the impact upon the mission accomplishment if the requested item is not acquired?
- (6) Is the anticipated workload provided?
- (7) Has consideration been given to the use of available excess assets to satisfy this requirement?

INSTRUCTIONS FOR PREPARING DA FORM 5027-R

<u>LETTER BLOCK</u>	<u>DATA ELEMENT</u>	<u>INSTRUCTIONS</u>
A	Date	Leave blank, this date will be entered by the MEDCASE Manager.
B	From	Enter department and hand receipt where the equipment will be located.
C	Leave Blank	
D	Point of Contact	Enter the person responsible for providing information and phone no.
E	Standard Nomenclature	Enter standard or generic nomenclature of equipment from the attached Standard Item Description Table.
F	Extended Description	Enter a clear, concise description of the item. Copies of manufacturer's literature should be attached to the request. Costs should be estimated at the projected purchase price.
G	Justification	Enter answers to the seven (7) HSC directed questions for justifications. Include information on i.e., new technology or any other applicable facts in your justification. (See also Table 1-3)
H	Personnel Training	Check appropriate block.
I	Item to be replaced	If item is to be retained as back-up a request with full justification will be attached. When the Commander reviews the MPR he will approve/disapprove the request for retention. (See also Figure 1-5)
J	Remarks	JSN and Room Numbers
K	Special Equipment Category	Check appropriate blocks.
L	Equipment Requirements	Self-explanatory (Negative response required of applicable).
M	Signature of Requestor	Normally this should be the hand receipt holder.
N	Signature of Dept/Div/ Svc Chief	Self-explanatory.

<b>MEDCASE PROGRAM REQUIREMENT</b>		DATE <span style="float: right;">128</span> A.
<b>ACTIVITY:</b> (Name, Address, and TDA No.) Madigan Army Medical Center Tacoma, WA 98431-5000 UIC: HSWOQJAA00	<b>FROM:</b> (Div/Dept/Svc) B <b>Hand Receipt No.</b>	<b>(FOR LOGISTICS DIVISION USE ONLY)</b> C. ACN _____ BLIC _____
<b>STANDARD ITEM DESCRIPTION OR GENERIC NOMENCLATURE:</b> (App N, SB 8-75-MEDCASE) E.		<b>POINT OF CONTACT &amp; PHONE NO.</b> NAME _____ D. AV _____ COM _____
<b>EXTENDED OR SYSTEM DESCRIPTION</b>  F.		
QUANTITY _____ UNIT PRICE _____		
<b>JUSTIFICATION</b> 1. HOW IS FUNCTION NOW BEING ACCOMPLISHED? G.  2. WHY IS THIS EQUIPMENT REQUIRED? (E.g., workload data, new technology, cost reduction, maintenance costs, equipment down-time or nonavailability, obsolescence of current methods, or other facts which demonstrate cogent reasons for your requirement.)  <div style="text-align: center;">-----SAMPLE-----</div>		
<b>ARE PERSONNEL ASSIGNED AND TRAINED TO OPERATE EQUIPMENT?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No (If No, explain) H.		<b>ITEM TO BE REPLACED</b> <input type="checkbox"/> Yes <input type="checkbox"/> No NSN: I. MMCN: Nomenclature: Serial No.: Model No.: Location: Proposed Disposition: <input type="checkbox"/> Retain as back-up <input type="checkbox"/> Turn-in as excess
<b>REMARKS:</b> (any additional considerations such as impact if equipment is not provided)  J.		
<b>SPECIAL EQUIPMENT CATEGORY</b> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <input type="checkbox"/> For New or Renovated Facility (BLIC F) (BLIC M)  <input type="checkbox"/> Clinical Investigation at Authorized MEDCEN/MEDDAC (BLIC C)  <input type="checkbox"/> Drug and Alcohol Program (BLIC D)  <input type="checkbox"/> Pollution Control (e.g. USAEMA) (BLIC P)         </div> <div style="width: 45%;"> <input type="checkbox"/> Replace, modernize, or acquire equipment for existing facility (BLIC R)  <input type="checkbox"/> Replacement Item of Equal Capability  <input type="checkbox"/> Replacement Item with Improved Capability  <input type="checkbox"/> New Requirement         </div> </div>		
<b>EQUIPMENT REQUIREMENTS</b> L. <div style="margin-left: 20px;"> <input type="checkbox"/> Additional Electrical Support or Emergency Power  <input type="checkbox"/> Water, Drainage or Steam <input type="checkbox"/> Exhaust  <input type="checkbox"/> Gas (Air, O<sub>2</sub>, Vacuum, Propane, etc.)  <input type="checkbox"/> Emits Radiation, Microwaves, Laser, Radioactive, or Hot Radioactive Materials as Component  <input type="checkbox"/> Unusually Heavy or Bulky <input type="checkbox"/> Requires Installation  <input type="checkbox"/> Heating, Ventilation, or Air Conditioning  <input type="checkbox"/> Other         </div>	<b>I CERTIFY THE INFORMATION ON THIS PAGE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.</b> M. _____ (Signature, Typed Name & Title of Requestor)	
	<b>THIS EQUIPMENT IS NECESSARY FOR THE ACCOMPLISHMENT OF THIS ACTIVITY'S MISSION.</b> N. _____ (Signature, Typed Name & Title of Chief of Div/Dept/Svc)	

APPENDIX G

EQUIPMENT ACQUISITION PROGRAM MEMORANDUM

MAMC Memorandum 700-5

DEPARTMENT OF THE ARMY  
MADIGAN ARMY MEDICAL CENTER  
Tacoma, Washington 98431-5000

MAMC Memorandum  
Number 700-5

24 SEP 1967

Logistics Division  
EQUIPMENT ACQUISITION PROGRAM

1. PURPOSE AND SCOPE. An equipment acquisition program is a coordinated, scheduled, systematic program for acquiring the assets needed to furnish the new facility appropriately for mission accomplishment. This program includes planning what is required; inventorying existing assets; determining what needs to be purchased; assigning responsibility for purchasing items; establishing a mechanism for receipt, storage and accountability for property intended for use in the new facility; and disposing of excess assets at the time of the move. The program coordinates all equipment acquisition functions of the medical center to avoid conflicts, and to more efficiently plan for acquiring assets. This plan applies to every functional element of the medical center for the duration of the Military Construction Army (MCA) project.

2. RESPONSIBILITIES.

a. Health Facility Project Officer.

(1) Responsible for notifying the Logistics Division of equipment delivery dates required to meet construction contract schedules, and for coordinating the turn-over of Logistical Category of Responsibility (LOGCAT) B and E equipment to the contractor.

(2) Responsible for approval of equipment requirements and the approval of all subsequent changes to the equipment list.

(3) Responsible for integration of equipment requirements into the construction project design.

(4) Responsible for reviewing Budget Line Item Code (BLIC) F and M Medical Care Support Equipment (MEDCASE) requirements to ensure that the equipment described is within the scope of the project and can be installed and supported by utilities in the intended location.

b. Logistics Division.

(1) Responsible for establishing and monitoring the execution of the equipment procurement program in support of the



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MCA project.

(2) Ensures that BLIC F and M MEDCASE programs for the project are established and that requirements are initiated in a timely manner.

(3) Advises the New Madigan Project Group (NMPG) of actions which must be accomplished to support the project, and obtaining approval for all items to be purchased with BLIC F and M MEDCASE funds.

(4) Responsible for providing equipment reports/hand receipts for all departments on an as-needed basis.

(5) Responsible for storage and property book accountability of all newly acquired equipment.

(6) Monitors equipment acquisition program to ensure conformance to established guidelines and regulatory requirements, and ensures equipment is acquired in a timely manner to meet the projected schedule.

c. Point of Contact (POC) for each activity.

(1) Responsible for establishing equipment requirements by room for the new facility.

(2) Responsible for periodic review of room list to ensure that information as to room usage and equipment requirements are accurate.

(3) Responsible for coordinating with the NMPO and gaining approval PRIOR to making any changes in planned use of rooms or equipment. Responsible for review of specifications submitted by the Huntsville Division, Army Corps of Engineers for LOGCAT B & E equipment

(4) Responsible for submitting MEDCASE Program Requirement (MPR) for established requirement for LOGCAT C equipment within their area.

(5) Responsible for submitting Purchase Request (PR) for purchase of LOGCAT C equipment.

(6) Responsible for developing equipment specifications and essential salient characteristics for LOGCAT C equipment. Must be submitted with PR.

(7) Responsible for coordinating with assigned action officers on an as-needed basis to develop criteria list or salient characteristics list for purchasing LOGCAT P equipment.

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(8) Responsible for review of MEDCASE BLIC R, Capital Expense Equipment Program (CEEP), Quick Return Investment Program (QRIP) or Productivity Capital Investment Program (PCIP), or other equipment procurement programs and assigning room number where equipment will be placed in the new facility. Equipment which is being programmed and procured for the existing facility must be considered as an asset for the new facility.

### 3. OUTLINE OF EQUIPMENT ACQUISITION PLAN.

See Appendix A.

### 4. EXPLANATION OF MEDCASE PROGRAM.

a. Definition. The MEDCASE Program is a centralized, Department of the Army (DA) level program which uses Other Procurement, Army (OPA) funds for the acquisition of capital investment equipment for fixed Army Medical Department Activities worldwide, and the initial equipage of major medical construction projects with non-expendable capital expense equipment. The program also manages the approval and acquisition of equipment requirements which are funded by MCA funds for major medical construction and renovation projects.

b. Funds. The MEDCASE program is the source of funds for the acquisition of equipment which is needed to support the mission of an Army hospital or clinic, which has a unit or system cost of \$5000 or more. It also provides funds to purchase non-expendables for medical construction projects, at the lower eligibility threshold of \$200 for medical equipment and \$50 for MAMC Memorandum 700 nonmedical equipment.

c. Administration. The MEDCASE program belongs to the Surgeon General, unlike other funds available to activities which belong to, and are controlled by, the "chain of command". The program is administered by the U.S. Army Medical Materiel Agency (USAMMA), Fort Detrick, Maryland, which also belongs to the Surgeon General. Each medical facility has a MEDCASE manager to participate in this program.

### 5. PROCEDURES:

a. The first step in the identification of requirements is to learn the capabilities of the new facility. Floor plans with a briefing on the functional design were given to the POC's between Jun and Sep 86. POC's have reviewed these plans and compared them to existing resources and the manner of accomplishing work in the present facility.

b. The second step is learning what was programmed for each room in the design of the facility, and determining what is

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required to accomplish the mission.

(1) The equipment list for each activity at MAMC begins with the Equipment Requirements Planning Guide (ERPG). This is a computer-generated list provided by the Health Facility Planning Agency (HFPA) of those requirements which should be necessary for the new facility. That list has been entered on a computer in the NMPO, and an activity-specific list has been provided to each POC. JUN-SEP 86.

(2) Each activity reviewed the list, corrected it and matched room equipment requirements to use of room as it is presently identified. The corrected list was returned to the NMPO for correction of the computer data base. JAN 87-SEP 87.

(3) The NMPO will correct the equipment requirements list and room list data base and provide corrected copies back to the activities and Logistics (MAY to SEP 87).

(4) The equipment list is a living document which must be updated periodically throughout the course of the project as changes occur. It is imperative that any consideration of changes in use of rooms be coordinated with the NMPO for approval prior to making any change. Every change must be reflected on your equipment list, for example, if you turned in a piece of equipment because it no longer functions it must be noted on the equipment list. No assumptions can be made about "Somebody" making changes. The POC is the responsible agent.

c. The third step is an inventory of existing assets. Following the establishment of a corrected list, Logistics will perform a reconciliation of the property book and a physical inventory of existing assets to determine which will be suitable for moving to the new facility. This is scheduled for the period 15 SEP 87 to 30 MAY 88. Each activity's equipment list will be annotated to reflect requirements that have a matching asset which must be relocated to the new facility. These items will be recorded on your equipment list with a LOGCAT R. The Materiel Management Code Number (MMCN) will be recorded on equipment list.

(1) The review and evaluation of equipment requirements and existing assets must take into account the potential obsolescence of equipment by the time the new facility will be occupied, the cost of removing, transferring and re-installing existing equipment, and the impact of potential slippage in occupancy dates due to construction delays on the useful life of an on-hand asset. An MCA project must not be viewed as an opportunity to acquire all new equipment for a facility. Replacement of existing equipment must be fully supported and justified through the MEDCASE approval process. The following criteria may be used as a guide when evaluating equipment:

## MAMC Memorandum 700-5

(a) Installed equipment: Installed equipment, having at least 24 months of useful life remaining at the time of planned occupancy of the new facility should be used in the new facility unless the equipment would be technologically obsolete or cannot be made to conform to safety standards or project design. Useful life cannot be defined only in months but must include maintenance history and maintenance cost. Equipment which is essential to operations in both the old and new facility during transition may be considered for replacement if the equipment cannot be removed, transferred, and re-installed in time to prevent curtailment of essential services.

(b) Equipment in place: Equipment in place which will have at least 12 months of useful life remaining at the time of planned occupancy of the new facility should be used in the new facility unless the equipment would be technologically obsolete.

(c) Stand-alone equipment: Equipment that does not require installation to be operable other than plugging into a power source (i.e., electric typewriter or patient weighing scale). Stand alone equipment with at least 24 months of usable life remaining at the time of planned occupancy of the new facility (Sep 1992) will be used in the new facility.

(2) Categorization of on-hand assets will be done by the Logistics Division and reviewed and approved by the NMPG prior to implementation. These condition codes give definition to assets for planning purposes, and will identify the most probable candidate for replacement.

(3) Replacement of an item previously identified as not required (i.e., an on-hand item that is lost, stolen, damaged, or turned in as unserviceable).

(a) Activity will identify any change in the ERPG to the activity point of contact (per para 2c this plan) for coordination with the NMPO.

(b) Equipment classified as unserviceable must be turned into the Property Management Branch on an appointment basis. Equipment to be turned in will be accompanied by a properly completed Request for Issue or Turn-In (DA Form 3161) and a Request for Maintenance (DA Form 2407). The JSN and the NSN or FSC as it appears on the ERPG will be annotated on the DA 3161 and the DA 2407.

(c) When the item has been turned into PMB, the activity must submit a MEDCASE Program Requirement (DA 5027-R) and a MEDCASE Transmittal Form (DA Form 5028-R) to the MEDCASE Manager for the replacement of the item.

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(d) The MEDCASE Manager will receive a copy of the DA 3161 and DA 2407 and the original DA 5027-R and the DA 5028-R for the replacement of the item.

(e) The NMPO will receive the MEDCASE package during the normal processing procedures (see Para 6g, this plan).

(4) The fourth step in the process is figuring out who is responsible for providing the item. The ERPG and the equipment list both categorize equipment by its LOGCAT. The LOGCAT is a single letter code that shows you not only who is responsible for providing an item, but also who is responsible for installing it. See Appendix B.

(5) LOGCAT A items are provided by the construction contractor as part of the construction project. LOGCAT E and F items are nearly always acquired through the MEDCASE Program. LOGCAT B and C items may be either MEDCASE items or items which must be ordered by the hospital using operating funds. Basically, MEDCASE items are those:

(a) Medical items with a unit price of \$200 or more

(b) Nonmedical items with a unit price of \$50 or more.

(6) The POC will be responsible for submitting MPR's and PR's for all LOGCAT C items on their equipment list.

(7) The NMPO will be responsible for submitting MPR's for all LOGCAT Z items. The Logistics Division will be responsible for submitting purchase orders.

(8) Responsibility for submitting MPR's and PR'S for LOGCAT P items will be assigned by the NMPO.

## 6. SUBMISSION OF MEDCASE/CEEP REQUIREMENTS.

### a. Requirements:

(1) Requirement - A need for an item of equipment, the acquisition of which is eligible for funding through the MEDCASE program, equals to a single end item, set, system or package.

(2) MEDCASE Program Requirement - An equipment need that has been identified, documented, justified, and approved locally, and forwarded through command channels to USAMMA on MPR/MSTF forms.

(3) PR - Requisition for purchase of an approved (1A) MEDCASE Program requirement.

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(4) BLIC. This means Budget Line Item Code. This simply identifies the type of MEDCASE funds which will be used to buy the item. LOGCAT E and F items are BLIC M. LOGCAT B and C items are BLIC F.

(5) ACN. It means Asset Control Number, which is like a serial number. It identifies your requirement throughout the review and approval process, and is how the requirement is recorded on the central data base. MEDCASE ACN's consist of three elements: an Item Description Code (IDC); a Fiscal Year Code (FY); and a Sequence Number (SEQ). ACN's are explained in greater detail in SB 8-75 MEDCASE.

b. After the scheduled inventory of existing assets (SEP 87-MAR 88), POC's will be given instructions to begin submitting MEDCASE Program Requirements (MPR) and MEDCASE Support and Transmittal Forms (MSTF). Together these documents provide an auditable record which documents the need, coordination, and approval of a MEDCASE requirement. In addition to the specific guidance found in SB 8-75 MEDCASE, it is necessary to indicate the JSN and the room number(s) where equipment will be positioned in the new facility. MPR must contain all utility requirements of the equipment. Electrical requirements necessary are volts, AMPS, and Hz. Plumbing and mechanical requirements include size, pressure, temperature, and flow rates of water, drain, exhaust or other utilities as required or catalog detailing these utilities.

c. USAMMA enters the requirement into the automated system that supports the program and sends it to one of the Surgeon General's functional consultants for review and approval. Approved MEDCASE requirements are listed on the priority list of each construction project. As the time approaches for equipment to be ordered, the Surgeon General's Office will release BLIC F and BLIC M MEDCASE funds for the procurement of the approved requirements.

d. Fill out the paperwork. A MEDCASE requirement is initiated by preparing a MPR and a MSTF. Other documents may be required to support statements made in the justification, such as maintenance records for items you want to replace. The MPR and the MSTF are the basic documents of the MEDCASE Program. It is important that you take the time to fill them out correctly. A log of MEDCASE requirements will be maintained by the Logistics Division. Suspense actions will be adhered to. Action through Headquarters will be taken to ensure that staffing officials and activities meet these suspense dates.

e. Justify the Requirement. Aside from identifying the requirement, the justification is the most important part of a MEDCASE submission. The justification need not be elaborate, but it should fully explain to a person who knows nothing about your

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operations why an item is needed. Do not assume that the justification for an item is obvious, even if the item is listed on your plans and the ERPG. The following points must be addressed in your justification:

(1) How is the function being done now?

(2) Is the item needed to replace existing equipment that will not be acceptable for the new facility? If so, you must explain why and provide supporting documentation (such as maintenance records, DA Form 2404, or a statement from the maintenance activity). If the item is being replaced because it is obsolete, explain why it is obsolete.

(3) Is the item needed because the new facility will be larger or is there some other difference between the old and the new facilities, and why the additional equipment is required.

(4) The justification must be supported by facts. Statements such as, ..."required to meet an increase in workload" would be explained in terms of what the workload was, and how much it has risen.

(5) The person responsible for approving your requirement must consider existing assets to meet the requirement. It is not enough to simply say ..."existing assets have been screened and will not meet the requirement." The following is an example of an acceptable explanation:

"The new Troop Medical Clinic will have four exam rooms and two screening rooms. Each room will require an examination table, JSN M7300. The existing TMC has two exam rooms and no screening rooms. Two examination tables are on hand in the existing clinic, however, one has been condition-coded "H" and will be turned in as unserviceable. Five additional exam tables will be required for the new clinic."

(6) The following seven questions which are HSC guidelines to a justification must be answered completely on each MPR:

(a) What is the requested item to be used for? Why is the item needed?

(b) How will the item be used with other equipment?

(c) What are the advantages of the requested item over equipment currently in use or available on the market? Why are these advantages needed?

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(d) Have specific details been presented regarding cost-benefits, personnel savings or productivity, the enhancement or curtailment of services, frequency or duration of breakdown, or other specific factors which may be relevant?

(e) What will be the impact upon mission accomplishment if the requested item is not acquired?

(f) Is the anticipated workload provided?

(g) Has consideration been given to the use of available excess assets to satisfy this requirement?

f. Submit the requirement. 15 NOV 87-30 APR 89. Once you have filled out the MPR/MSTF, and have attached any supporting documents required, submit the requirement to the MEDCASE Program Manager. Routing will be from the MEDCASE Program Manager through the NMPO (Engineer clearance and/or Maintenance clearance if nonmedical), through Medical Maintenance, and then back to the MEDCASE Program Manager. The MEDCASE Program Manager will then assign the appropriate BLIC and ACN and will continue the routing as needed. QRIP or PCIP requirements will be coordinated between the NMPO, the Resource Management Division and the Logistics Division.

(1) During the period of 2 Jan 88 through 30 Dec 89, Logistics will accept purchase requests for approved MEDCASE requirements (BLIC F). A schedule will be published as to submission dates by activity.

(2) Assembling information early ensures that you will meet suspense deadlines for your activity.

(3) Routing of the Purchase Request - Activity points of contact will submit the purchase request to the NMPO for verification against the equipment program list. NMPO will submit the purchase request to the MEDCASE Manager for procurement process.

The success of the equipment acquisition program depends upon coordinated efforts of large numbers of people assigned to the medical center, upon clear understandings of areas of responsibility, and upon responses to the demands of the program. The efforts of every individual will be necessary if the program is to be successful.

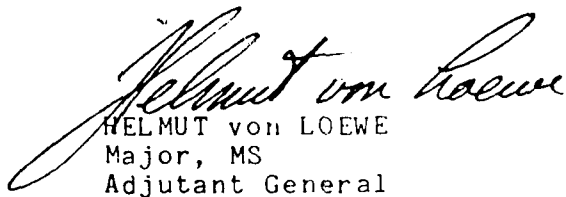


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The proponent agency of this memorandum is the Logistics Division. Users are invited to send comments and suggested improvements to the Chief, Logistics Division.

FOR THE COMMANDER:

OFFICIAL:

  
HELMUT von LOEWE  
Major, MS  
Adjutant General

T. M. PITTMAN  
Colonel, MS  
Chief of Staff

DISTRIBUTION:

"A"

## MAMC Memorandum 700-5

## APPENDIX A

## Outline of Equipment Acquisition Plan

- a. Activities review Equipment Replacement Program Guide (ERPG) with the New Madigan Program Office (NMPO) (JUN-SEP 86).
- b. Activities return corrected equipment list to NMPO (JUL 86-JAN 87).
- c. Submission of BLIC M requirements (JAN-MAR 87).
- d. Logistics reconciles hand receipt with equipment list, inspects and codes on-hand equipment that will be used to meet requirements for new hospital. (15 SEP 87-30 MAY 88). Activities will be informed of exact schedule at a later date.
- e. Activities begin submitting BLIC F MPR's to MEDCASE (15 NOV 87-30 APR 89). Activities will be provided an exact schedule at a later date.
- f. Activities submit purchase requests, specifications and essential salient characteristics (2 JAN 88-30 DEC 89). Activities will be provided an exact schedule at a later date.
- g. Logistics identifies and begins processing excess equipment for disposal. (JUN 88-30 MAR 90).

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APPENDIX B

LOGCAT Single Letter Code

- a. LOGCAT A: Contractor Furnished - CF 2\*  
Contractor Installed - CI 2

LOGCAT B: Government Furnished - GF 1\* and CI 2

LOGCAT C: Government installed - GI 1 and GF 1

LOGCAT E: GF 3\* and CI 2

LOGCAT F: GF 3 and GI 3

\*NOTES: 1 - Paid for by either Other Procurement Army (CPA)-  
MEDCASE (BLIC F) (if eligible) or OMA Funds

2 - Paid for by construction funds (MCA)

3 - Funded through the MCA-MEDCASE program (BLIC M)

- b. There have been three additional locally identified  
LOGCAT's established:

LOGCAT R: Existing asset - relocate to new facility

LOGCAT P: Common item - centrally purchased (GF/GI)

LOGCAT Z: Furniture package - centrally purchased  
(GS/GI)

# DISPOSITION FORM

142

For use of this form, see AR 340-15, the proponent agency is TAGO.

REFERENCE OR OFFICE SYMBOL	SUBJECT		
HSJ-L0 (340)	Utilization of MEDCASE BLIC F & M Funds to Satisfy Current MEDCASE Requirements		
TO	FROM	DATE	CMT 1
DCA/CS	C, LOG DIV	28 Jan 88	COL Warner/kg/77072

1. References:

- a. Supply Bulletin (SB) 8-75 MEDCASE, dated 6 Jun 86.
- b. Telephone conversation with MAJ Smelter and Mr Wagner (HSC MEDCASE Office).
- c. Telephone conversation with Mr Clodfelter (OTSG MEDCASE Office).
- d. Discussion with COL Sargent.

2. IAW SB 8-75, MEDCASE funds and requirements are divided into categories which are identified by a Budget Line Item code (BLIC). These categories describe the purpose for which the equipment and funds are required.

- a. BLIC F identifies funds and equipment required to equip major medical Military Construction Army (MCA) funded projects. BLIC F requirements equate to Logistical Category (LOGCAT) B and C items as identified by the Equipment Requirements Planning Guide (ERPG) which is an OTSG document that once refined becomes the Equipment Requirements List for the new Madigan. Subject lists are provided to each activity as they are completed by the NMPO.
- b. BLIC M identifies funds and equipment required to equip major medical MCA funded construction projects. BLIC M requirements equate to LOGCAT E and F items identified on the ERPG. BLIC M differs from all other MEDCASE BLICs in that it utilizes MCA funds, while all other BLICs utilize OPA-MEDCASE funds.
- c. BLIC R identifies funds and equipment required to replace, upgrade or modernize existing equipment or to provide new or expanded capabilities. BLIC R is utilized for the current facility.

3. LOGCATs are codes that assign responsibility for the acquisition and installation of equipment required for a project.

- a. LOGCAT B items are government furnished and contractor installed and are acquired as BLIC F.
- b. LOGCAT C items are government furnished and government installed and are acquired as BLIC F.
- c. LOGCATs E and F are government furnished and contractor installed and are acquired as BLIC M.

4. The MEDCASE officers at Health Services Command and the Office of the Surgeon General reiterated that BLIC F and M funds are to equip the new facility and are not intended to supplement MAMC's annual MEDCASE, BLIC R

HSJ-LO (340)

SUBJECT: Utilization of MEDCASE BLIC F & M Funds to Satisfy Current MEDCASE Requirements

budget. In fact, as the BLIC F funds are used the BLIC R funds will correspondingly decrease. However, if MAMC has an urgent requirement (which can be justified) in the current facility for an item which is on the Equipment Requirements List for the new hospital the Commanding General (CG) may approve the use of BLIC F monies. To assist the CG such requirements will be processed through the New Madigan Project Group (NMPG) and that body will recommend as to whether or not a particular requirement should or should not be purchased with BLIC F money. This must be done on a case by case basis only. It is also to be remembered that BLIC F money cannot be used to procure that item again or install that item (if applicable) in the new facility. If the item breaks or wears out before moving to the new hospital, MAMC will have to replace it out of its own budget.

5. Budgeting for BLIC F and M is not the same process as budgeting for BLIC R. For BLIC R, a specific amount of money is specified for MAMC to commit and obligate during a given period of time. BLIC F and M funds are based on need, as reflected on the Equipment Requirements List after purging on-hand assets. Approved needs (1A status) will set the dollar limit. The key therefore is to submit MPRs for the items on the Equipment Requirements List.

6. The last BLIC "F" MEDCASE Program Requirements (MPRs) are currently due in to the LOG DIV NLT 30 Sep 88.

7. Guideline figures for BLIC "M" and BLIC "F" money are as follows:

BLIC "M" - \$21,581,487

BLIC "F" - \$34,610,991 (for programming purposes only as the actual figures will be based on MPRs received and approved for 1A status).

8. At this point in time incremental expenditures by year have not been established. When they are established they will be based on required delivery dates and then adjusted for procurement lead times, etc. The process is on time at this juncture. At the earliest, PRs probably will not be processed against the BLIC "F" Program until late FY 89.

9. In essence the BLIC "F" program works like this: an account has been opened but the only deposits that have been made are MPRs with 1A status for LOGCATS B and E which are contractor installed items. In addition, since it is a very unique piece of equipment the uninterrupted power source for AMO has also gone this route. Other MPR deposits will be made on a scheduled basis as activity Equipment Requirements Lists are completed and 1A status' are received. (Submission of MPRs should be complete by the end of FY 88.)



LYLE W. WARNER  
Colonel, MS  
C, Logistics Division

APPENDIX H

TRANSITION BUDGET (PERSONNEL)

TRANS PER - WOK 1

## TRANSITION BUDGET (PERSONNEL)

NO.	OFFICE #	GRADE	TITLE	FY 88	FY 89	FY 90	FY 91	FY 92
1	DCA/CS	1	TRANS. COORDINATOR	\$34,492	\$34,492	\$34,492	\$34,492	\$34,492
2	DCA/CS	1	CLY TYP FOR TRANS COORDINATOR	\$16,818	\$16,818	\$16,818	\$16,818	\$16,818
3	POIT	1	TRANS. TRAINER	\$0	\$24,492	\$24,492	\$24,492	\$24,492
4	CMS	1	NURSE, CMS	\$0	\$28,508	\$28,508	\$28,508	\$28,508
5	CMS	6	MED SUPPLY TECH CMS CASE CART	\$0	\$100,903	\$100,903	\$100,903	\$100,903
6	CMS	4	MED SUPPLY TECH CMS CASE CART	\$0	\$0	\$0	\$67,272	\$67,272
7	C, LOG	1	LOG PLANNER MAT DIST SYSTEM	\$24,492	\$34,492	\$34,492	\$34,492	\$34,492
8	HSPG	1	CUSTODIAL INSPECTOR	\$0	\$25,338	\$0	\$0	\$0
9	PMB	1	ASST MEDCASE MANAGER	\$20,972	\$20,972	\$20,972	\$20,972	\$20,972
10	PMB	1	CLY TYP (MEDCASE)	\$18,814	\$18,814	\$18,814	\$18,814	\$18,814
11	PMB	1	CLY TYP (MEDCASE)	\$16,818	\$16,818	\$16,818	\$16,818	\$16,818
12	PMB	1	CLY TYP (ASST DCCF)	\$14,979	\$14,979	\$14,979	\$14,979	\$14,979
13	PMB	1	SUPPLY CLK TYP (EXCESS EQUIP)	\$18,814	\$18,814	\$18,814	\$18,814	\$18,814
14	PMB	1	SUPPLY CLK (HAND RECEIPT MGR)	\$0	\$0	\$16,818	\$16,818	\$16,818
15	PMB	4	SUPPLY CLK (ASST HR MANAGER)	\$0	\$0	\$59,916	\$59,916	\$59,916
16	PMB	5	WAREHOUSE WORKER	\$0	\$0	\$126,690	\$126,690	\$126,690
17	PMB	10	WAREHOUSE WORKER	\$0	\$0	\$244,260	\$244,260	\$244,260
18	PMB	1	WAREHOUSE WORKER (LINEN)	\$0	\$0	\$24,426	\$24,426	\$24,426
19	PMB	7	WAREHOUSE WORKER (LINEN)	\$0	\$0	\$68,089	\$68,089	\$68,089
20	PMB	1	SUPPLY CLERK TYP (LINEN)	\$0	\$0	\$14,979	\$14,979	\$14,979
21	MAINT	1	CODING CLERK (TYPING)	\$14,979	\$14,979	\$14,979	\$14,979	\$14,979
22	MAINT	1	BIONED MAINT TECH	\$29,709	\$29,709	\$29,709	\$29,709	\$29,709
23	MAINT	1	BIONED MAINT TECH	\$0	\$30,620	\$30,620	\$30,620	\$30,620
24	MAINT	1	BIONED MAINT SUPERVISOR	\$0	\$37,750	\$37,750	\$37,750	\$37,750
25	CONTR	1	CONTRACT SPECIALIST (1102)	\$34,492	\$34,492	\$34,492	\$34,492	\$34,492
26	CONTR	1	PROCUREMENT CLERK (1106)	\$18,814	\$18,814	\$18,814	\$18,814	\$18,814
27	CONTR	1	CONTRACT SPECIALIST (1102)	\$0	\$28,508	\$28,508	\$28,508	\$28,508
28	CONTR	2	PURCHASING AGENT (1105)	\$0	\$46,605	\$46,605	\$46,605	\$46,605
29	CONTR	2	PROCUREMENT CLERK	\$0	\$23,636	\$23,636	\$23,636	\$23,636
30	MATRL	1	WAREHOUSE WORKER (MDS)	\$25,338	\$25,338	\$25,338	\$25,338	\$25,338
31	MATRL	2	WHSE WKR (2 MDS - 1 STORAGE)	\$0	\$76,014	\$76,014	\$76,014	\$76,014
32	MATRL	4	WHSE WKR (2 MDS - 2 STORAGE)	\$0	\$0	\$101,352	\$101,352	\$101,352
33	MATRL	7	SPL TECH (5 FLR/2 DISPATCHERS)	\$0	\$0	\$0	\$0	\$117,726
34	NMFO	1	CLERY TYPIST	\$16,818	\$16,818	\$16,818	\$16,818	\$16,818
35	NMFO	1	SECRETARY	\$18,814	\$18,814	\$18,814	\$18,814	\$18,814
36	NMFO	1	DRAFTSMAN	\$20,972	\$20,972	\$20,972	\$20,972	\$20,972
37	NMFO	1	INTERIOR DESIGN COORDINATOR	\$0	\$28,508	\$28,508	\$28,508	\$0
TOTAL				\$356,175	\$827,017	\$1,458,209	\$1,525,481	\$1,614,699

APPENDIX I

TRANSITION BUDGET (SUPPLY AND EQUIPMENT)



TRANS. WOI

## TRANSITION BUDGET (SUPPLY AND EQUIPMENT)

NO. OFFICE	ITEMS	FY 98	FY 99	FY 90	FY 91	FY 92
1. CONTR	OFFICE ITEMS	\$0	\$8,000	\$0	\$0	\$0
2. HSKPG	INITIAL CLEANING	\$0	\$0	\$0	\$250,000	\$0
3. HSKPG	OLD HOSPITAL	\$0	\$0	\$0	\$0	\$1,500,000
4. HSKPG	NEW HOSPITAL	\$0	\$0	\$0	\$0	\$3,000,000
5. CMS	CASE CARDS FOR NEW SYSTEM	\$0	\$4,000	\$0	\$0	\$0
6. CMS	EXPAND INVENTORY	\$0	\$500,000	\$500,000	\$50,000	\$50,000
7. CMS	INCREASE INVENTORY	\$0	\$0	\$45,000	\$50,000	\$0
8. LOG	MOVING	\$0	\$0	\$0	\$250,000	\$0
9. LOG	MED MAINT. TRAINING	\$0	\$0	\$0	\$766,000	\$0
10. PHARMACY	STOCKAGE COSTS	\$0	\$0	\$0	\$50,000	\$0
11. LOG	ADDITIONAL LINEN	\$0	\$0	\$23,000	\$0	\$0
12. LOG	LINEN CARDS	\$0	\$0	\$150,000	\$150,000	\$0
13. LOG	ADDITIONAL INVENTORY MDS	\$0	\$0	\$18,000	\$19,000	\$0
14. AG	REPRODUCTION CENTER	\$24,800	\$22,750	\$18,550	\$16,650	\$12,000
15. NWPO	OFFICE SUPPLY & EQUIPMENT					
	TOTALS	\$24,800	\$552,750	\$759,650	\$1,821,650	\$4,562,000

APPENDIX J

TOTAL ARMY ANALYSIS FY 90-96



DEPARTMENT OF THE ARMY  
MADIGAN ARMY MEDICAL CENTER  
TACOMA, WASHINGTON 98431-5000

REPLY TO  
ATTENTION OF

1 APRIL 1988

HSJH-RMN

MEMORANDUM FOR: COMMANDER, US Army Health Services Command, ATTN:  
HSRM-PC, LTC NORRIS, Ft. Sam Houston, Tx 78234

SUBJECT: Input to Total Army Analysis - 96

1. In compliance with your request to identify manpower needs for the years FY 90 - 96, we submit (2) issues for consideration (See Attached). Issue #1 concerns new requirements needed to staff the new facility beginning in 1992. Issue #2 centers on resources required to establish a Cardiac Surgery Service in 1992.
2. Nursing requirements were identified using the MS3 standards which were based on an increase of 37 hospital beds, (primarily in the critical care areas) an average occupancy of 80% and an increase in monitored beds.
3. The restructuring of current resources is anticipated to be addressed within the next year as concepts of operation in the new facility become final. It is anticipated that some resources will be realigned, however the analysis submitted is believed to be representative of true resource needs for the new MAMC.
4. Point of contact at Madigan Army Medical Center is MAJ Maestas/357-6914.

FOR THE COMMANDER:

2 ENCLS

*for Petrus H. Burns*  
HELMUT von LOEWE  
MAJ, MS  
Chief, IMO

## TAA-96 ISSUE

A. ACTIVITY: Madigan Army Medical Center, Tacoma, Washington

B. UIC ISSUE: WOQ1AA

C. PRIORITY: 1 OF 2 Issues

D. CONCEPT: Relocation to the new state of the art MAMC in early 1992 will require additional staff to operationalize the multitude of new and complex hospital information, communication and logistical systems and provide services for an additional 37 medical/surgical beds and 33 nursery beds.

E. SUPPORTING INFORMATION:

1. OFFICER REQUIREMENTS:

AFD	AMSCO	BR/FA	01	02	03	04	05	06
HRD	847711.31	68H Pharmacy			1			
HRC	847711.31	68H Pharmacy			1			
DQA	848612.29	67D AMO			1			
HRS	847711.33	61S Radiology				1		
HRU	847711.33	61S Radiology				1		
HCB	847711.12	66G OB/GYN Ns	2	2				
HDA	847711.12	66D Peds Ns		1	1			
HFA	847711.12	66C Psych Ns		2	2			
HAC	847711.12	66H CCU Ns		2	1			
HAH	847711.12	66H Med ICU Ns	4	4	1	1		
HAR	847711.12	66H SICU/MICU Ns		3	4			
HBC	847711.12	66H Surg ICU Ns		1				
HSB	847711.12	66H Rec Room Ns		1	1			
HTA	847711.41	66H Amb Ns				2		
HSG	847711.36	66E Op Ns		2	1			
HSK	847711.37	66E Same Day Surg Ns		1	1			
HSF	847711.36	66F Anesth Ns			2	2		
HSF	847711.36	60N Anesth Svc					1	
HSR	847711.38	68J Physical Therapy			1			
HRL	847711.32	68F Clinical Path			1			
HRL	847711.32	61U Clinical Path				1		
HRQ	847711.32	68F Blood Bank			1			
HRP	847711.32	68E Microbiology		1				
HRM	847711.32	68C Chemistry		1				
SUBTOTALS			6	21	20	8	1	

TOTAL MILITARY REQUESTED REQUIREMENTS = 56

2. WARRANT OFFICER REQUIREMENTS: NOT APPLICABLE

## 3. ENLISTED REQUIREMENTS:

AFD	AMSCO	BR/FA	E1-E3	E4	E5	E6	E7	E8.
NNH	847711.35	91D Cent Mat Svc		2	1			
HRC	847711.31	91Q Pharm Tech			6	1		
NNB	847711.51	76J Mat Dist Sec		5		1	1	
HCB	847711.12	91A OB Unit	2	2				
HFA	847711.12	91F Psych Unit		2	2			
HAH	847711.12	91C Med ICU			4	2		
HAH	847711.12	91A Med ICU	4	4				
HAC	847711.12	91C Coronary Care			2			
HAR	847711.12	91C SICU/MICU			1	1		
HBC	847711.12	91A Surg ICU	1	1				
HSB	847711.12	91C Recovery Rm			1			
HTA	847711.12	91C Amb Care					2	
HSG	847711.36	91D Op Room		2	2			
HSK	847711.37	91D Same Day Surg		2	3			
ARB	847711.43	75B Ad and Disp		1	1			
HSR	847711.38	68J Phys Therapy			1			
HRL	847711.32	92B Clinical Path			4	1		
HRP	847711.32	92B Microbiology			2	1		
HRM	847711.32	92B Chemistry			2			
SUBTOTALS			7	21	32	7	3	

TOTAL MILITARY REQUESTED REQUIREMENTS = 70

## 4. CIVILIAN REQUIREMENTS:

NNH	847711.35	Cent Mat Svc	4
HRD	847711.31	Inpt Pharmacy	6
HRC	847711.31	Outpt Pharm	2
HRB	847711.31	Pharm Sup Svc	1
DQA	848612.29	AMO	7
HRU	847711.33	Radiology	3
NND	847711.51	Prop Mgt	1
NNB	847711.51	Mat Dist Sec	23
HCB	847711.12	OB Unit	2
HDA	847711.12	Psych Unit	2
HAC	847711.12	Coronary Care	3
HAH	847711.12	Med ICU	12
HAR	847711.12	SICU/MICU	2
HBC	847711.12	Surg ICU	2
HSK	847711.12	Same Day Surg	6
ARB	847711.43	Inpt Records	2
ARB	847711.43	Pat Affairs	1
ARA	847711.41	Info Desk	4
ADA	847711.61	Distribution	3
AMA	847711.63	Mail Room	1
DFB	847790.10	Audiovisual	3

## Civilian requirements continued:

HRG	847711.32	Pathology	11
HRM	847711.32	Chemistry	2
HRL	847711.32	Clinical Path	2

TOTAL CIVILIAN REQUESTED REQUIREMENTS=105

TOTAL HOSPITAL REQUIREMENTS = 231

## F. BASIS OF REQUIREMENT:

1. Major system changes in the new facility will include a fully automated materiel distribution system and case cart system for exchange of the majority of all sterile/non-sterile, medical/non-medical supply items. These systems will be fully operational 24 hours/day, such is not the case currently.

2. Plans to implement the multimillion dollar Digital Imaging Network System and the CHCS hospital information system will require resources to be increased in the Information Management Division.

3. Clinical services will increase dramatically due to new services and/or technological advancements in the areas of Pathology (STAT Lab, Virology/Immunology Section), Pharmacy (5 more Satellite Pharmacy's), Critical Care Units (30 additional hardwired/telemetry beds), Operating Rooms (4 more suites), Radiology (1 - 2 additional MRI's, 1 CAT SCAN, 1 Mammography unit) and Maternal Child (30 more peds/postpartum beds and 37 nursery/labor-delivery beds).

G. TRADE-OFFS: Clerical and some administrative support staff will be redistributed with the consolidation of the surgical and medical clinics into "super" clinics. General medical/surgical beds will decrease by 23 beds for a net increase of 37 beds, excluding maternal/child beds. Resources from the med/surg areas have been realigned to the critical care areas and have been factored into the above requirements.

H. POC: MAJ GAIL M. MAESTAS  
HSHJ-RMN  
357-6914

## TAA-96 ISSUE

A. ACTIVITY: Madigan Army Medical Center, Tacoma, Washington

B. UIC ISSUE: WOQ1AA

C. PRIORITY: 2 of 2

D. CONCEPT: Cardiac (open heart) Surgery Services are currently being studied for implementation in the new facility. Additional resources would be required to support this service.

E. SUPPORTING INFORMATION:

1. OFFICER REQUIREMENTS:

AFD	AMSCO	BR/FA	01	02	03	04	05	06.
HHB	847711.22	61K/Cardio Surg				1	1	
HHB	846761.1J	61J/Resident			1			
HHB	847711.22	66J/CL Ns Spec			1			
HSF	847711.36	60N/Anesth Svc					1	
HSF	847711.36	66F/Ns Anesth				1		
HSG	847711.36	66E/OR Ns			2			
HGC	847711.22	60H/Cardiologist			1			
HAR	847711.12	66H/Intensive Care Ns	2		3			
HSR	847711.38	68J/Physical Therapy			1			
HME	847711.22	68R/Soc Work Svc			1			
SUBTOTALS				2	10	2	2	

TOTAL OFFICER REQUESTED REQUIREMENTS: 16

2. WARRANT OFFICER REQUIREMENTS: 2

HHB 847711.22 600A/Perfusionists 2 (W03)

3. ENLISTED REQUIREMENTS:

			E1-E3	E4	E5	E6	E7	E8
HSG	847711.36	91D/Op Svc Ns			2			
HRL	847711.32	92B/Clinical Path			1			
HRQ	847711.32	92B/Blood Bank			1	2		
HRP	847711.32	92B/Microbiology			1			
HSE	847711.34	91N/Cardiac Cath				2		
ARB	847711.43	75B/Patient Adm	2	2				
SUBTOTALS			2	2	5	4		

TOTAL ENLISTED REQUIREMENTS: 13

## 4. CIVILIAN REQUIREMENTS:

HAR	847711.12	Intensive Care Ns	4
HSE	847711.34	Cardiac Cath	1
ARB	847711.43	Patient Adm	1
HRS	847711.33	Diag Radl Tech	2
TOTAL CIVILIAN REQUIREMENTS			8

TOTAL REQUIREMENTS FOR A CARDIAC SURGERY SERVICE = 39

## F. BASIS OF REQUIREMENT:

1. In FY 1987, MAMC referred 163 patient to local hospitals for cardiac by-pass and/or angioplasty procedures. These procedures have cost approximately 4 million dollars. A cost-benefit analysis is currently under way to determine the feasibility of adding this service in 1992 in the new MAMC.

2. Resources required to support a cardiac surgery service are over and above those requirements noted in Issue #1.

3. Requirements were based on a workload of 165 Coronary Artery By-pass Graft and 60 Angioplasty procedures the first year of implementation; 3 - 4 cases per week. Workload will increase significantly in the Operative area, Surgical Intensive Care Unit, Cardio-pulmonary Services, Stat Lab/ Blood bank, Cardiac Cath Lab, Radiology, and Patient Administration arena.

G. POC: MAJ GAIL M. MAESTAS  
HSHJ-RMN  
357-6914



APPENDIX K

ACCREDITATION MANUAL FOR HOSPITALS

STANDARD: EMERGENCY PREPAREDNESS

- PL.3.6** The authority of the safety committee is approved in writing so that, through the chairman or the safety director or officer, action can be taken when conditions exist that pose an immediate threat to life or health or pose a threat of damage to equipment or building.\* Circle One
- 1 2 3 4 5 NA
- PL.3.6.1** This authority is approved by the governing body or chief executive officer or designee, as appropriate, and by the medical staff.\* 1 2 3 4 5 NA
- PL.3.7** There is evidence of information exchange and consultation between the safety committee and the various safety programs (eg, safety programs for engineering and maintenance, housekeeping, laboratory, nursing, and dietetic services), the infection control committee, the hospitalwide quality assurance function, and other standing committees.\* 1 2 3 4 5 NA
- PL.3.8** There is evidence that the conclusions, recommendations, and actions of the safety committee are evaluated by the appropriate administrative directors of the areas affected and that proper action is documented in subsequent safety committee minutes.\* 1 2 3 4 5 NA

**Standard: Education**

- PL.4** The hospital has an organized safety education program.\* 1 2 3 4 5 NA

**Required Characteristics**

- PL.4.1** There is documented evidence of a safety education program that includes orientation of new employees to general hospitalwide safety practices, as well as orientation and continuing education regarding safety practices specific to individual departments/services. 1 2 3 4 5 NA
- PL.4.2** Orientation and in-service education programs utilize findings of the quality assurance function, the safety committee, the infection control committee, and other appropriate standing committees. 1 2 3 4 5 NA
- PL.4.3** Orientation and in-service education programs are documented.\* 1 2 3 4 5 NA
- PL.4.4** There is evidence that the education programs are analyzed at least annually to determine their effectiveness. 1 2 3 4 5 NA

**Standard: Emergency Preparedness**

- PL.5** The hospital has an emergency preparedness program designed to provide for the effective utilization of available resources so that patient care can be continued during a disaster.\* 1 2 3 4 5 NA

**Required Characteristics**

- PL.5.1** A hospital designated as a disaster emergency center by a local authority such as the fire department or civil defense agency has an emergency preparedness program that addresses disasters both external and internal to the hospital.\* 1 2 3 4 5 NA

\*The asterisked items are key factors in the accreditation decision process. For an explanation of the use of the key factors, see "Using the Manual," page ix.

## Circle One

- PL.5.2** Concise, documented plans to be implemented during a disaster are established through the emergency preparedness program.\* 1 2 3 4 5 NA
- PL.5.2.1 Emergency preparedness plans provide for the effective utilization of available resources to prevent or minimize the consequences of a disaster.\* 1 2 3 4 5 NA
- PL.5.2.2 Emergency preparedness plans are pertinent to a variety of disasters and are based on the hospital's capabilities and limitations.\* 1 2 3 4 5 NA
- PL.5.3** The role of the hospital in communitywide disaster plans is identified in the emergency preparedness program. 1 2 3 4 5 NA
- PL.5.4** The emergency preparedness program addresses hospital preparedness, including space utilization, supplies, communication systems, security, and utilities. 1 2 3 4 5 NA
- PL.5.5** The emergency preparedness program addresses staff preparedness, including staffing requirements and the designation of roles and functions, particularly in terms of capabilities and limitations.\* 1 2 3 4 5 NA
- PL.5.6** The emergency preparedness program addresses patient management, including modified schedules, criteria for the cessation of nonessential services, and patient transfer determinations, particularly in terms of discharge and relocation.\* 1 2 3 4 5 NA
- PL.5.7** The emergency preparedness program is implemented, evaluated, and documented semiannually.\* 1 2 3 4 5 NA
- PL.5.7.1 Each implementation (whether a drill or an actual emergency) exercises emergency preparedness plan elements related to hospital preparedness, staff preparedness, and patient management; at least one implementation includes an influx of patients from outside the hospital.\* 1 2 3 4 5 NA
- PL.5.7.2 Documentation of the emergency preparedness program includes, at the least, problems identified during implementation, corrective actions taken, and staff participation.\* 1 2 3 4 5 NA
- PL.5.8** There is a fire plan that addresses the use and function of fire alarm and detection systems, containment, and the protection of lives, including transfer to areas of refuge, evacuation plans, and fire extinguishment.\* 1 2 3 4 5 NA
- PL.5.8.1 It is recommended that on each work shift the hospital have appropriately trained personnel responsible for assisting with the implementation of the fire plan and the activation of the nonautomatic components of the fire safety systems. 1 2 3 4 5 NA
- PL.5.8.1.1 The fire plan is implemented at least quarterly for each work shift of hospital personnel in each patient-occupied building.\* 1 2 3 4 5 NA
- PL.5.8.1.1.1 Documentation of the implementation of the plan includes, at a minimum, problems identified during implementation, corrective actions taken, and staff participation.\* 1 2 3 4 5 NA
- PL.5.9** Hospital employees and staff are provided with appropriate education and training in elements of the emergency preparedness program and in elements of the fire plan.\* 1 2 3 4 5 NA

\*The asterisked items are key factors in the accreditation decision process. For an explanation of the use of the key factors, see "Using the Manual," page ix.

## Circle One

- PL.5.10** The emergency preparedness program is evaluated annually and is updated as needed.

1 2 3 4 5 NA

**Standard: Hazardous Materials and Wastes**

- PL.6** There is a system that is designed to safely manage hazardous materials and wastes.\*

1 2 3 4 5 NA

**Required Characteristics**

- PL.6.1** The hazardous materials and wastes management system addresses the management of hazardous materials and wastes from the point of entry into the hospital to the point of final disposal.\*

1 2 3 4 5 NA

- PL.6.2** The hazardous materials and wastes management system addresses the protection of patients, personnel, visitors, and the community environment.

1 2 3 4 5 NA

- PL.6.3** Policies and procedures are developed that include a process for identifying hazardous materials and wastes (eg, toxic materials, infectious wastes, radioactive materials) and for managing them using techniques such as substitution of less hazardous agents, changes of processes, isolation, and ventilation.\*

1 2 3 4 5 NA

- PL.6.4** Policies and procedures relating to the operation of the hazardous materials and wastes management system are reviewed at least annually by the safety committee for chemical and physical hazards, by the infection control committee for infectious hazards, and by the radiation committee for radioactive hazards.\*

1 2 3 4 5 NA

PL.6.4.1 Recommendations, conclusions, and actions of these committees are reported to the hospitalwide quality assurance function.\*

1 2 3 4 5 NA

- PL.6.5** Individuals required to handle hazardous materials or wastes are provided with appropriate job training.\*

1 2 3 4 5 NA

- PL.6.6** The hazardous materials and wastes management system includes a program for controlling the handling and disposal of gaseous hazardous materials.\*

1 2 3 4 5 NA

PL.6.6.1 Included in this program are procedures pertaining to the control of waste gas levels in areas such as surgical suites, central supply, and laboratories.\*

1 2 3 4 5 NA

- PL.6.7** The hazardous materials and wastes management system includes a program for controlling the handling and disposal of liquid and solid hazardous materials.\*

1 2 3 4 5 NA

PL.6.7.1 Included in this program are procedures pertaining to the elimination of hazards through the elimination and treatment of the waste at the source, the packaging of the waste, safe transport systems within the hospital, and adequate and safe disposal facilities either on-site or off-site.\*

1 2 3 4 5 NA

- PL.6.8** The hazardous materials and wastes management system is established and operated in accordance with applicable law and regulation.\*

1 2 3 4 5 NA

\*The asterisked items are key factors in the accreditation decision process. For an explanation of the use of the key factors, see "Using the Manual," page ix.

APPENDIX L

RETRO-FIT WORK ITEMS



DEPARTMENT OF THE ARMY  
MADIGAN AREA OFFICE  
P.O. BOX 92126  
TILLCUM, WASHINGTON 98492-0126

REPLY TO  
ATTENTION OF

OFFICE MEMORANDUM 09

CENPS-FO-MC  
13 May 1988

NEW MADIGAN ARMY MEDICAL CENTER  
Procedures for Phase III (Follow-on/Retro-fit) Work Items

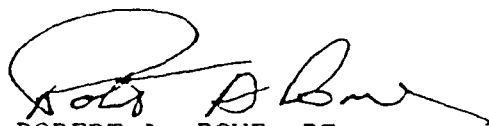
1. PURPOSE: The purpose of this plan is to establish procedures to identify, evaluate, approve, and incorporate changes into Phase III follow-on/retro-fit contract(s) for the new Madigan Army Medical Center (MAMC). This plan is consistent with the Intensive Management Plan (IMP) which provides for deferral of changes to a follow-on/retro-fit contract where the change is not imperative to basic construction contract progress and/or does not have significant impact to either cost or basic construction contract completion schedules.
2. GENERAL: Items of work to be included in Phase III contract(s) may come from several sources as discussed below.
  - (a) Program Items - Certain items were deferred from inclusion in main construction contracts during the design phase of project development. An example is the Intrusion Detection System installation. The Military Medical Facilities Unit (CENPS-EM) is responsible for preparing appropriate documentation for all items deferred during design. CENPS-EM will review and approve all deferred program items for Phase III contracts.
  - (b) User Request Changes - Health Facilities Project Office (HFPO) and Director of Engineering and Housing (DEH) may request changes to ongoing contracts to add, delete, or modify features of work. These proposed changes are processed in accordance with change order procedures of the IMP. The Area/Resident Engineer will receive, collect, and monitor user requested changes and present them to the IMP program review group. The program review group will determine that all or part of a change should be deferred to a follow-on/retro-fit contract. The Area/Resident Engineer will notify the change proponent and CENPS-EM of this determination. If a change is approved in part for inclusion in current construction and in part for inclusion in a Phase III contract, it will be the responsibility of the change proponent to revise the scope of work to clearly show work to be deferred to Phase III. The revised scope of work will be forwarded to the Area/Resident Engineer. Approval of these items for inclusion in a Phase III contract will be by the program review group.

(c) Mandatory Changes - Unforeseen conditions, design omissions, or design errors may surface during the main construction contract period. Identification may rise from normal contract action, by contractor requests for information (RFIs), or user conflict reports. The Area/Resident Engineer may defer changes or additions only when they can reasonably be accomplished later by competitive procurement. When a change is deferred, the Area/Resident Engineer will provide a copy of the confirming correspondence to HFPO and CENPS-EM for information, coordination, and to identify that change will be deferred to Phase III. The Area/Resident Engineer will also develop a scope of work including justification and in coordination with CENPS-EM, will approve them for inclusion in a Phase III contract.

3. The Area/Resident Engineer will prepare or request CENPS-EM to prepare scope of work for user requested and deferrable mandatory changes. The Area/Resident Engineer will then prepare an order of magnitude cost estimate (Code A) and an assessment of construction impact, including anticipated dates when construction changes can be initiated and any important advisory information and provide package to CENPS-EM. CENPS-EM will coordinate with HFPO to confirm/establish time frames for accomplishing the work that will minimize conflicts with the User.

4. CENPS-EM will develop the design concepts (approx. 35% level) for changes; including sketches, narratives, and any interface or verification requirements of as-built conditions. These design concepts will be structured to be stand alone packages. The cost estimate will be upgraded to Code B level. The design concepts and estimates will be reviewed by the Area/Resident Engineer and the user/proponent representatives. These design concepts will be updated if required and filed by CENPS-EM for subsequent packaging and development of contract documents. CENPS-EM will maintain a tracking system and data base, including status of deferred change items, and provide summary reports at each Quarterly Management meeting.

5. Phase III bid documents will be prepared from the approved design concepts on file in CENPS-EM. CENPS-EM will coordinate with HFPO to confirm that change is still valid and consistent with the User's priorities. CENPS-EM will then coordinate selection of appropriate procurement vehicle and coordinate logical grouping/consolidation of individual changes into Phase III contract packages.



ROBERT A. ROWE, PE  
Area Engineer  
Madigan Area Office

WADSWORTH ARMY MEDICAL CENTER  
FOLLOW-ON CONTRACTS  
COMPLETE REPORT SORTED ON ITEM NUMBER  
05/25/88

ITEM NO	TITLE	WHEN RECEIVED	PRIORITY SOURCE	DESIGN TYPE	DESIGN COMPLETE	EST CODE	ESTIMATE	DESIGN START	CONTRACT TYPE	PACKAGE	IFB	AUTH RCVD	AWARD	NUMBER
001	PROVIDE FLAPPOLE FOR FACILITY	05/19/88	UN2	EDP-0002	/ /		\$ 0	/ /			/ /	/ /	/ /	
002	LABOR/DELIVERY CHANGES	05/19/88	UN2	EDP-0009	/ /		\$ 0	/ /			/ /	/ /	/ /	
003	REVISIONS TO SOCIAL WORK SERVICES	05/19/88	UN2	EDP-0014	/ /		\$ 0	/ /			/ /	/ /	/ /	
004	HOSPITAL GRADE RECEPTACLES, A CODE CHG	05/19/88	UN2	EDP-0028	/ /		\$ 0	/ /			/ /	/ /	/ /	
005	LOCKS FOR NURSESTERS	05/19/88	UN2	EDP-0030	/ /		\$ 0	/ /			/ /	/ /	/ /	
006	ADD TWO DOUBLE CHAMBER AUDIO BOOTHS	05/19/88	UN2	EDP-0035	/ /		\$ 0	/ /			/ /	/ /	/ /	
007	ETO VISUAL ALARMS	05/19/88	UN2	EDP-0036	/ /		\$ 0	/ /			/ /	/ /	/ /	
008	OCCUPATIONAL THERAPY CHANGES	05/19/88	UN2	EDP-0040	/ /		\$ 0	/ /			/ /	/ /	/ /	
009	ADD PATIENT MONITORS	05/19/88	UN2	EDP-0041	/ /		\$ 0	/ /			/ /	/ /	/ /	
010	WALL & CORNER GUARD CHANGES AND ADDITIONS	05/19/88	UN2	EDP-0047	/ /		\$ 0	/ /			/ /	/ /	/ /	
011	ADD CLOSED CIRCUIT TV TO THE CHAPEL	05/19/88	UN2	EDP-0049	/ /		\$ 0	/ /			/ /	/ /	/ /	
012	POWER AND LIGHT FOR CART WASH.	05/19/88	UN2	EDP-0053	/ /		\$ 0	/ /			/ /	/ /	/ /	
013	ADD SOILED UTIL ROOM AND UTIL FOR SCOPE	05/19/88	UN2	EDP-0056	/ /		\$ 0	/ /			/ /	/ /	/ /	
014	ADD SEVERAL PIECES OF CASE WK RM 6-43-9	05/19/88	UN2	EDP-0063	/ /		\$ 0	/ /			/ /	/ /	/ /	
015	HARDWARE SCHEDULE CHANGES	05/19/88	UN2	EDP-0077	/ /		\$ 0	/ /			/ /	/ /	/ /	
016	DICTATING SYSTEM CHANGES	05/19/88	UN2	EDP-0081	/ /		\$ 0	/ /			/ /	/ /	/ /	
017	TELEPHONE CHANGES	05/19/88	UN2	EDP-0083	/ /		\$ 0	/ /			/ /	/ /	/ /	
018	CYSTO/IVP ROOM EQUIPMENT INSTALLATION	05/19/88	UN2	EDP-0084	/ /		\$ 0	/ /			/ /	/ /	/ /	
019	TV OUTLET TIE INTO SYSTEM (CODE 3429)	05/19/88	UN2	RF1-1528	/ /		\$ 0	/ /			/ /	/ /	/ /	
020	BATTERY CHARGER 1-6, ESP ANN CIR CODE3435	05/19/88	UN2	RF1-1534	/ /		\$ 0	/ /			/ /	/ /	/ /	
021	TV BRACKETS-SEISMIC SUPPORT (CODE 3245)	05/19/88	UN2	RF1-1465	/ /		\$ 0	/ /			/ /	/ /	/ /	
022	HANDRAIL/TRASH COMPACTOR PROBLEM	05/19/88	UN2	RF1-1516	/ /		\$ 0	/ /			/ /	/ /	/ /	
023	INSTALL PERMANENT CYLINDERS IN ALL LOCKS	05/19/88	UN2	-0000	/ /		\$ 0	/ /			/ /	/ /	/ /	
024	ADD SINK & CASE WORK-SIMULATOR ROOM	05/19/88	UN2	EDP-0089	/ /		\$ 0	/ /			/ /	/ /	/ /	
025	CUBICLE CURTAINS	05/19/88	UN2	-0000	/ /		\$ 0	/ /			/ /	/ /	/ /	
026	SIGNS-INTERIOR	05/19/88	UN2	-0000	/ /		\$ 0	/ /			/ /	/ /	/ /	
027	RELOCATE FIRE HYDRANT ENERGY PLANT	/ /	UN1	DF -1973	/ /		\$ 0	/ /			/ /	/ /	/ /	

19 ECP's

DEF WILD - OFFICE Harmonandum # 9, 13 July 88



APPENDIX M

FURNITURE AND FURNISHINGS PACKAGES

8.14. Furniture and Furnishings Packages (F&F). Chapter 8.2.3. (F&F Property Responsibilities), and Appendix E (Interior Design) provide definitions and an in-depth review of the timeframes, basic scopes of work, and individual agency responsibilities for the F&F packages. This section will not revisit these specific procedures and requirements, but will attempt to increase the depth of the reader's understanding through the highlighting of additional review considerations, and potential problem areas.

8.14.1. F&F Design Review. The HFPD is responsible for design review of

the Interior Design submittal packages. This review should be conducted as an HFPO team effort, typical of the Operational Systems Review (Chapter 6.10), and coordinated with the local medical activity's sections, typical of the Functional Systems Review (Chapter 6.11). For the F&F packages, the design input required from the operational sections is somewhat different than it is for the other LOG CATs of property. The sections should provide guidance on types of furniture (i.e. special chairs for the orthopedic and obstetric areas), the quantity of furniture (i.e. number of book cases and file cabinets), and any other special considerations (i.e. blackout drapes for the conference room); they should not be specially concerned about the color scheme (it should match the Building Related Design for interior finishes), and the actual specifications for the procurement packages (the F&F design A/E should have specified the best product available, within funding guidelines). When conducting the review the HFPO should consider the following.

a. F&F items should be compatible and standardized throughout the facility. Example: by specifying the same type of chairs for waiting rooms (less special areas like obstetrics), the chairs can be interchanged between waiting areas as necessary.

b. F&F specifications should be written around industry standard colors and fabrics. Using special/custom fabrics and colors will make obtaining replacement items extremely expensive, time consuming, and often impossible.

c. The HFPO must insure that the quantities of F&F requested by the

operational section will in fact fit into the designed space. Often the 166  
operational section will attempt to stuff into a room three times the  
number of desks/chairs and cabinets the space can hold.

d. The F&F design A/E should provide a list of those items which  
require assembly. This list should also contain information detailing: the  
number of separate components, number/size of individual shipping cartons  
(so that Logistics can program storage space), the complexity of the  
assembly, and normal time required to assemble (wall lockers can take an  
unbelievable number of man-hours to assemble).

e. For the Artwork portion of the F&F package, the HFPO should pay  
special attention to: the types of artwork (paintings, posters, photos,  
artifacts), the need for effective security frames, and the subject matter  
(certain packages are either not compatible with the facility's location  
or with specific sections within the facility). The perception of a  
quality health care facility is very much determined by it's appearance,  
and artwork can have a major impact on that appearance (also, the  
activity's staff always takes a particular interest in the theme of the  
artwork).

f. For the window coverings (drapery) portion of the F&F package, the  
HFPO should insure the A/E has included on-site verification of window  
dimensions (by the manufacturer) prior to fabrication. It is not uncommon  
for the constructed window openings to have different dimensions than  
those shown on the drawings.

8.14.2. -Procurement activities. The local medical activity is solely responsible for managing the procurement of the F&F packages. They may use the services of either their local procurement agents or Huntsville Division to actually procure the items. The following are some specific procedures and potential problems which must be addressed during procurement.

a. There are a number of ways in which the different items of F&F property can be procured: multiple contracts for each type of property, group buys for different property provided by the same manufacturer, and one procurement package for all F&F through a single major manufacturer, supplier, or receiving agent. This guide considers the latter preferable as it simplifies control of procurement and delivery activities, and the single procurement contract can be expanded to include receiving, warehousing, and installation activities (thus resolving a number of potential problems with one solution). The disadvantage to this type of procurement is that if the contract is not comprehensive and correct, any resulting problems are greatly compounded.

b. Contract delivery dates must be a major concern in the F&F procurement package(s). These dates must coincide with the milestones established on the Transition Network. The procurement manager should assess how accurate the manufacturers usually are in forecasting their delivery dates, and then choose a contract delivery date which will most likely insure delivery to meet the milestone, while minimizing any local storage time.

c. The procurement agent must be very cautious in approving any variances to the procurement specifications (no matter how thorough the A/E is there are always some changes requested). F&F colors and fabrics with generally the same name/description can vary greatly between manufacturers.

d. If the manufacturer, supplier or single source property agent will also be providing installation services, the MEDCASE representative must coordinate with the activity's Installation manager to insure all of the necessary installation requirements have been addressed in the procurement specifications, to include: installation target dates, response times, length of installation period, protection of property/facility, turn around time on damaged property, on-site supervision, trash removal, etc..

8.14.3. Installation Activities. As with other LOG CATs of property (Chapter 8.7), there are a number of alternate methods of installing the F&F packages, as well as, numerous special installation considerations. The following are some installation requirements unique to F&F packages.

a. Because so many of the items are exactly alike, it is very difficult to properly account for F&F property once it has been installed (furniture has a tendency to move about the facility during move-in). The local medical activity's Property Book officer should plan for (well in advance of receipt) those procedures necessary to insure property accountability before/as the items are being installed. Recommend having the manufacturers or receiving agents tag every item with a bar graph label indicating the items hand receipt number.

b. Installation of the artwork package requires continuous supervision by someone with an eye for color and form (either a special installation contractor or a hand picked staff member). Due to changes in constructed space (locations of thermostats, electrical outlets, fire alarms, etc.), and installed property, the type and location of a piece of artwork may have to be adjusted during installation. These changes will require immediate attention from a supervisor who can appropriately alter the location of the original image or exchange artwork between different areas of the facility.

8.15. Group Buy Property. Group Buy property is defined as: those types of property which are common to a number of different areas of the facility, and are more efficiently obtained utilizing one procurement contract. The Property Planning Committee should identify these types of property items early in the project, and assign a manager to collate the facility's requirements and prepare the appropriate documents. Appendix M contains a listing of some of the property items usually included in Group Buy packages. Due to the size of these procurement packages and their impact on effective hospital operations, they must be assigned a high priority in the Property Planning Network, and given special attention by the procurement agents. Beyond the fact that these Group Buy packages are composites with high dollar values, and long lead times for procurement (which is why they must be begun as soon as possible), they have no special procurement/installation considerations not already discussed in this Chapter.

## INTERIOR DESIGN

6.1. General. The interior design requirements for the Office of The Surgeon General Military Construction, Army (OTSG-MCA) projects span the design, construction, and occupancy phases of each construction project.

6.1.1. The requirements for each project include:

- (1) Building-Related Design - Design of Interior Finishes
- (2) Furniture-Related Design - Design of the Furniture & Furnishings (F&F) Package
- (3) Procurement of the (F&F) Package
- (4) Management of the F&F Package

6.1.2 The building-related design is completed by 100% design. Following the 100% design submittal management responsibility for the project is transferred from the Design and Development (D&D) Branch to the Project Management (PM) Branch.

6.2. Building-Related Design. The building-related design is managed by the Corps of Engineers, accomplished by the project Architect/Engineer (A/E), and funded with MCA design funds.

6.2.1. Specifications for the design are included in the construction contract and the contractor awarded the project is responsible for implementation of the design under supervision by the Resident Engineer. HFPD (D&D) is responsible for review of the interior design submittals during the design of the project.

6.2.2. Building-related design is divided into five submittal phases corresponding to the design schedule:

- (1) 2d Concept-- Concept Narrative & Perspectives.
- (2) 3d Concept-- Color boards & Generic Furniture Placement Plans.
- (3) 4th Concept 35%-- Up date comments from above review comments.
- (4) 65%-- Room Finish Schedule, Draft Specifications, Samples.
- (5) 100%-- Four (4) copies of Narrative, Photos of Color Boards, Finish Schedule and Placement Plans.

6.3. Furniture-Related Design. Unlike the building-related design where control is in the hands of OCE, furniture-related design is managed by the



Health Facility Planning Agency. The design is prepared by either the project A/E as an option to the MCA design contract, or by an interior design office contracted by OTSG. Furniture-related interior design services are funded by OTSG.

6.3.1. Traditional furnishing designs required the interior designer to identify each furniture item on the drawings produce specifications and a complete list of each selected item in the project. Actual experience indicates that most of the designs were not utilized by the users after occupancy. This situation was caused by numerous factors by the end result was that the completed design was not followed. Traditional designs are very labor intensive and expensive to the government. An alternative to the traditional system came from the theory of palette design. The main purpose of the palette is to provide the selection and color coordination of furniture from government supply sources. The actual placement, item and color selection (of the pre-approved furniture items) will be the responsibility of the user.

6.3.2. Each project will have a scope of work prepared by HFFA which specifically addresses the project. The scope of work is normally divided into three distinct sections such as:

(1) Package I - Provide Furniture & Color Selection, Specifications and Data Sheets, Instructions for User Implementation.

(2) Package II - Supplement to the above, includes functional layouts of common areas such as waiting and conference rooms.

(3) Package III - Supplement to Pkg I, provides complete selection of art work and layout for curtains.

6.3.3 The HFFO or POC for the project will interface with the USAHFFA interior design coordinator to insure the users' desires and needs are represented. The Palette Design normally starts 18 months prior to the first shipment of furniture arriving on the project.

6.3.4 Compiling the palette information into a single procurement document is normally the responsibility of the users. Interface of the HFFO is normally very close and in some cases the HFFO compiles the palette.

6.3.5 In most situations, the interior designer who completed the palette will be retained by the government for 18 months following the final submittal. The Interior Designer is available for updates as necessary due to changes in GSA contracts and color selections.

6.4. Procurement of the Furniture and Furnishings Package. Procurement of the furniture package is managed by the local Logistics Division and is accomplished by either the local Procurement Division or by contracting, with OTSG funds, for central procurement. The procurement of items for the SIF package is funded with Medical Care Support Equipment (MEDCARE) SIF P funds.

6.5. Management of the Interior Design Package. Management of the furniture<sup>172</sup> package is handled at the local level by the Chief, Logistics Division at the medical facility in coordination with the Health Facility Project Officer (HFPO) or the project Point of Contract (POC). Management of the package includes the responsibility for arranging storage of the items prior to occupancy, assemble and installation of the items, and inventory control of all the new and existing items. If necessary, storage and/or assemble and installation can be contracted, dependent upon funding availability.

APPENDIX N

MAJOR SYSTEMS MAINTENANCE SUPPORT RESPONSIBILITY

DEH, HEALTH CARE SUPPORT DIVISION  
Major Systems Maintenance Support  
Responsibility

DIVISION	DIVISION TITLE	FACILITY COMPONENT	SPEC1	SPEC2	SPEC3	PPRIOR	# HOURS TRAINING	P/M	RESPONSIBILITY	SERVICE	CR	I.H.	REC RSRCE
2	SITWORK	ROADS, PARKING	2510	2611	0	ROUT	0	ANNUAL CONTRACT	DEH, ROAD SHOP	0	0.00	1	
2	SITWORK	CONCRETE	2510	0	0	ROUTN	0	0 IH w/ CTRT ASSIST	0 IH w/ CTRT ASSIST	0	0.00	2	
		SIDEWALKS & CURBS											
2	SITWORK	PAVEMENT	0	0	0	ROUTN	0	0 IH w/ ANN CTR ASSIST	N/A	0	0.00	3	
2	SITWORK	MARKING											
2	SITWORK	WATER WELLS (C-#2,3 P-#4)	2670	0	0	EMERG	0	DEH, WTER/SEWER SHOP	DEH, WTER/SEWER SHOP	0	0.00	4	
2	SITWORK	WATER	2665	0	0	URGNT	0	DEH, WTER/SEWER SHOP	DEH, WTER/SEWER SHOP	0	0.00	5	
		DISTRIBUTION											
2	SITWORK	STORM DRAINAGE	2720	0	0	URGNT	0	DEH, WTER/SEWER SHOP	DEH, WTER/SEWER SHOP	0	0.00	6	
2	SITWORK	SANITARY SEWERS (W/LIFT STA)	2730	2731	2732	EMERG	8	DEH, WTER/SEWER SHOP	DEH, WTER/SEWER SHOP	0	0.00	7	
2	SITWORK	IRRIGATION	2810	0	0	ROUTN	8	DEH, WATR/SEWER SHOP	DEH, WATR/SEWER SHOP	0	0.00	8	
		SYSTEM											
2	SITWORK	FENCING, CHAIN	2830	0	0	ROUTN	0	ANNUAL RQMT'S CNTR	ANNUAL RQMT'S CNTR	0	0.00	9	
		LINK											
2	SITWORK	GROUND/RESERVOIR	2925	2950	0	ROUTN	0	ANNUAL CONTRACT	ANNUAL CONTRACT	0	0.00	10	
		MAINTENANCE											
2	SITWORK	TRAFFIC SIGNS	2845	0	0	ROUTN	0	DEH, ROADS/PNT SHOP	DEH, ROADS/PNT SHOP	0	0.00	11	
3	CONCRETE	PRECAST ARCH PANELS	3450	0	0	ROUTN	0			0	0.00	12	
4	MASONRY	MASONRY WORK	4230	0	0	ROUTN	0			0	0.00	13	
5	METALS	STRUCTURAL STEEL	5120	0	0	URGNT	0	DEH, BLDGS & GROUNDS	DEH, BLDGS & GROUNDS	0	0.00	14	
		INSPECTION											
5	METAL	STRUCTURAL STEEL JOINT	5120	0	0	URGNT	0	DEH, BLDGS & GROUNDS	DEH, BLDGS & GROUNDS	0	0.00	15	
		INSPEC											
6	WOOD & PLASTIC	FINISH CARPENTRY REPAIRS	6200	0	0	ROUTN	0			0	0.00	16	
7	THERMAL	ROOFING/SHEETME	7510	7540	7600	URGNT	0	ANNUAL RQMT'S CONTRA	ANNUAL RQMT'S CONTRA	0	0.00	17	
	PROTECT	TAL WORK											
7	THERMAL	SKYLIGHTS/SHADE	7820	12521	0	URGNT	0			0	0.00	18	
	PROTECT	/STG SYSTEM											
7	MOISTURE	IMPERVIOUS	7111	0	0	ROUTN	0			0	0.00	19	
	PRCTEC	STEAM LINER											
8	DOORS & WINDOWS	STEEL/WOOD AND VAULT DOORS	8110	8210	8102	URGNT	0			0	0.00	20	
8	DOOPS & WINDOWS	MISC. AND ACCORDIAN DOORS	8300	8353	0	ROUTN	0			0	0.00	21	
8	DOOPS & WINDOWS	REVOLVING DOORS	8300	0	0	URGNT	0			0	0.00	22	
8	DOOPS & WINDOWS	VENETION BLINDS	0	0	0	ROUTN	0			0	0.00	23	

DEH, HEALTH CARE SUPPORT DIVISION  
Major Systems Maintenance Support  
Responsibility

DIVISION DIVISION TITLE	FACILITY COMPONENT	SPEC1	SPEC2	SPEC3	PRIOR	# HOURS P/M	RESPONSIBILITY	SERVICE	CR	I.H. REC RSRCE #
						TRAINING				
8 DOORS & WINDOWS	ALUMINUM WINDOWS	8520	0	0	URGNT	0			0	0.00 24
8 DOORS & WINDOWS	DOOR/WINDOW HARDWARE & ACCESS.	8700	8730	8810	ROUTN	0			0	0.00 25
8 DOORS & WINDOWS	GLASS/GLAZING	8810	0	0	URGNT	0			0	0.00 26
8 DOORS & WINDOWS	LOCKSMITH	8700	0	0	URGNT	0	In-House	In-House	0	0.00 27
8 DOORS & WINDOWS	AUTOMATIC DOORS	8720	0	0	URGNT	0	ANNUAL SVCS CONTRACT	ANNUAL SVCS CONTRACT	0	0.00 28
8 DOORS & WINDOWS	OVERHEAD DOORS	0	0	0	URGNT	0		ANNUAL SVCS CONTRACT	0	0.00 29
9 FINISHES	WALL FINISHES	9101	9215	9250	ROUTN	0			0	0.00 30
9 FINISHES	CERAMIC TILE	9310	0	0	ROUTN	0	HOUSEKEEPING		0	0.00 31
9 FINISHES	EPOXY TERRAZZO FLOORING	9440	0	0	ROUTN	0	HOUSEKEEPING		0	0.00 32
9 FINISHES	VINYL (RESILIENT) FLOORING	9650	0	0	ROUTN	0	HOUSEKEEPING	ANNUAL SVCS CONTRACT	0	0.00 33
9 FINISHES	CARPETING	9680	0	0	ROUTN	0	HOUSEKEEPING		0	0.00 34
9 FINISHES	INTERIOR PAINTING	9900	0	0	ROUTN	0	ANNUAL ROUTS CONTRAC		0	0.00 35
20 SPECIALTIE S	GUARDS	0	0	0	ROUTN	0			0	0.00 36
10 SPECIALTIE S	TOILET PARTITIONS & ACCESSORY	10160	10800	0	ROUTN	0			0	0.00 37
10 SPECIALTIE S	RAISED FLOORING	10270	0	0	ROUTN	0			0	0.00 38
10 SPECIALTIE S	ARCHITECTURAL SIGNS (INT & EXT)	10430	10440	0	ROUTN	0			0	0.00 39
11 EQUIPMENT	CASEWORK	11701	11702	0	ROUTN	0			0	0.00 40
11 EQUIPMENT	NURSE SERVERS	11708	0	0	ROUTN	0			0	0.00 41
11 EQUIPMENT	NOURISHMENT & ICE STATION	11708	0	0	URGNT	0			0	0.00 42
11 EQUIPMENT	PATHOLOGICAL WASTE INCINERATOR	11171	0	0	URGNT	24			0	0.18 43
11 EQUIPMENT	STATIONARY COMPACTOR SYS (2CY)	11172	0	0	URGNT	24			0	0.10 44
11 EQUIPMENT	RETORT STERILIZER	11173	0	0	URGNT	16	MC	MC	0	0.00 45
11 EQUIPMENT	WATER PUMP, VERT TURB (FIRE)	11210	0	0	URGNT	8			0	0.00 46

DEH, HEALTH CARE SUPPORT DIVISION  
Major Systems Maintenance Support  
Responsibility

DIVISION	DIVISION TITLE	FACILITY COMPONENT	SPEC1	SPEC2	SPEC3	PRIOR	# HOURS P/M	RESPONSIBILITY	SERVICE	CR	I.H. REC RSRCE #
								TRAINING			
11	EQUIPMENT	FOOD SERVICE EQUIPMENT	11400	0	0	URGNT	80	In-House	In-House	0	0.00 47
11	EQUIPMENT	LOADING DOCK EQUIP (LIFT RMPS)	11160	0	0	URGNT	0			0	0.04 48
11	EQUIPMENT	REFRIGERATION EQUIPMENT	11704	0	0	EMERG	0			0	0.00 49
11	EQUIPMENT	STEAMWASHER	11705	0	0	URGNT	0			0	0.00 50
11	EQUIPMENT	LABORATORY HOODS	11704	0	0	URGNT	0			0	0.00 51
11	FURNISHING	CUBICLE CURTAIN TRACK	11708	0	0	POUTH	0			0	0.00 52
12	FURNISHING	THEATRE CHAIRS	12700	0	0	POUTH	0	HOUSEKEEPING	ANNUAL SVCS CONTRACT	0	0.00 53
12	FURNISHING	CHAPEL FURNISHINGS	12621	0	0	POUTH	0	HOUSEKEEPING		0	0.00 54
14	CONVEY SYSTEMS	CLOTHING CONVEYING SYSTEMS	0	0	0	URGEN	0			0	0.00 55
14	CONVEY SYSTEMS	AUTOMATIC TRANSPORT SYSTEM	14000	0	0	EMERG	120	12 MO MAINTW/1yr opt	CALL BACK SERVICE	0	0.00 56
14	CONVEY SYSTEMS	DUMBWAITERS	14120	0	0	URGNT	4	12 MO MAINT CONTRACT	MAINT CTR O/T NEGLCT	0	0.00 57
14	CONVEY SYSTEMS	ELEVATORS (12ea)	14210	0	0	URGNT	8	12 MO MAINT CONTRACT	CALL BACK SERVICE	0	0.00 58
14	CONVEY SYSTEMS	ESCALATORS (4ea)	14310	0	0	URGNT	8	12 MO MAINT CONTRACT		0	0.00 59
14	CONVEY SYSTEMS	AUTOMATIC BOX CONVEYOR	14520	0	0	EMERG	46	12 MO MAINT CONTRACT	CALLBACK SVS (NOT O/T)	0	0.00 60
14	CONVEY SYSTEMS	SURGICAL LIFT CAPTS	14511	0	0	EMERG	0			0	0.00 61
14	CONVEY SYSTEMS	ATS ELEVATORS	14519	0	0	EMERG	0			0	0.00 62
14	CONVEY SYSTEMS	PNEUMATIC TUBE SYSTEM	14580	14581	14582	EMERG	84	12 MO CNTP(3 yr opt)	CLBK SVS (NOT O/T)	0	0.00 63
15	MECHANICAL	PLUMBING SYSTEM(BACKFLOW PREV)	15410	0	0	URGNT	1			0	0.00 64
15	MECHANICAL	PLUMBING- PIPING/FIXTURES	15410	0	0	URGNT	0			0	0.00 65
15	MECHANICAL	NATURAL GAS DISTRIBUTION	15350	0	0	EMERG	6			0	0.00 66
15	MECHANICAL	MEDICAL GAS SUPPLY/DISTPBH (order, alt. v.l. m. use same)	15410	0	0	EMERG	96			0	0.00 67
15	MECHANICAL	DOMESTIC PUMPS, MTRS & CONTPLS	15410	0	0	URGNT	16			0	0.00 68
15	MECHANICAL	FIRE SPRINKLER SYSTEM	15501	15550	0	URGNT	36	DEH FIRE PROT DIV	DEH FIRE PROT DIV	0	0.00 69

Handwritten note: 15 Mechanical - Plumbing - Piping - Fixtures - Natural Gas - Medical Gas - Domestic Pumps, Mtrs & Contpls - Fire Sprinkler System

04/04/88

DEH, HEALTH CARE SUPPORT DIVISION  
Major Systems Maintenance Support  
Responsibility

DIVISION	DIVISION TITLE	FACILITY COMPONENT	SPEC1	SPEC2	SPEC3	PRIOR	# HOURS P/M RESPONSIBILITY	SERVICE	CR I.H. REC RSRCE #
15	MECHANICAL	CO2 FIRE <del>EXT</del> <sup>suppression</sup>	15502	0	0	URGNT	4		0 0.00 70
15	MECHANICAL	(ELECTRICAL) HALON 1301	15503	0	0	URGNT	0 ANNUAL CONTRACT	ANNUAL CONTRACT	0 0.00 71
15	MECHANICAL	SUPPRESSION HEAT SPACE DOMESTIC H.W.	15601	0	0	URGNT	0		0 0.00 72
15	MECHANICAL	SYST <sup>water</sup>							
15	MECHANICAL	HEATING SYSTEMS	15601	0	0	ENERG	48		0 0.00 73
15	MECHANICAL	OIL/GAS FIRED	15602	0	0	ENERG	40 DEH BOILER PLANT SEC		0 0.00 74
15	MECHANICAL	BOILER PLANT	15650	0	0	ENERG	80		0 0.00 75
15	MECHANICAL	CENTRAL A/C	15705	0	0	URGNT	128		0 0.00 76
15	MECHANICAL	REFRIGERATION	15705	0	0	ENERG	4		0 0.00 77
15	MECHANICAL	HEAT & A/C AIR DISTRIBUTION	15801	0	0	URGNT	0		0 0.00 78
15	MECHANICAL	UNDERGRND HEAT DISTR SYS	15801	0	0	URGNT	0		0 0.00 79
15	MECHANICAL	VENTILATION AND EXHAUST	15806	0	0	ENERG	89 12 MO MAINTENANCE	12 MO MAINTENANCE	0 0.00 80
15	MECHANICAL	ENGR SMOKE CONTROL SYSTEM	16106	0	0	ENERG	28		0 0.00 81
16	ELECTRICAL	ENERG GEN SYS	16263	16262	0	ENERG	80		0 0.00 82
16	ELECTRICAL	(TRANSFER SWCH) LOAD	16262	0	0	ENERG	0		0 0.00 83
16	ELECTRICAL	SHED/RESTORE SYS (LSRS)	16402	0	0	ENERG	0	DEH, EXTERIOR ELECT	0 0.00 84
16	ELECTRICAL	ELECTRICAL DISTRIBUTION (EXT)	16402	0	0	URGNT	0	DEH EXTERIOR ELECT	0 0.00 85
16	ELECTRICAL	STREET LIGHTING	16415	0	0	ENERG	42		0 0.00 86
16	ELECTRICAL	ELECT DIST (INT 16415)	16415	0	0	URGNT	0		0 0.00 87
16	ELECTRICAL	LOW VOLT <600 VOLT	16415	0	0	URGNT	0		0 0.00 88
16	ELECTRICAL	ELECT DIST (INT 16415)	16415	0	0	URGNT	0		0 0.00 89
16	ELECTRICAL	COMPCLS	16415	0	0	URGNT	0		0 0.00 90
16	ELECTRICAL	LIGHTING SYS	16415	0	0	URGNT	0		0 0.00 91
16	ELECTRICAL	O/T SURGICAL	0	0	0	URGNT	0		0 0.00 92
16	ELECTRICAL	UPS FOR	0	0	0	URGNT	0		0 0.00 93
16	ELECTRICAL	ESCS/LSRS/FDAS	16601	0	0	URGNT	0		0 0.00 94
16	ELECTRICAL	PROTECTION	16601	0	0	URGNT	0		0 0.00 95
16	ELECTRICAL	SYSTEM	16601	0	0	URGNT	0		0 0.00 96
16	ELECTRICAL	SNOW/ICE	16415	0	0	URGNT	0		0 0.00 97
16	ELECTRICAL	MELTING SYSTEM	16415	0	0	URGNT	0		0 0.00 98
16	ELECTRICAL	ELECT RADIANT HEATING PANELS	16415	0	0	URGNT	0		0 0.00 99

Page No. 5  
04/04/88

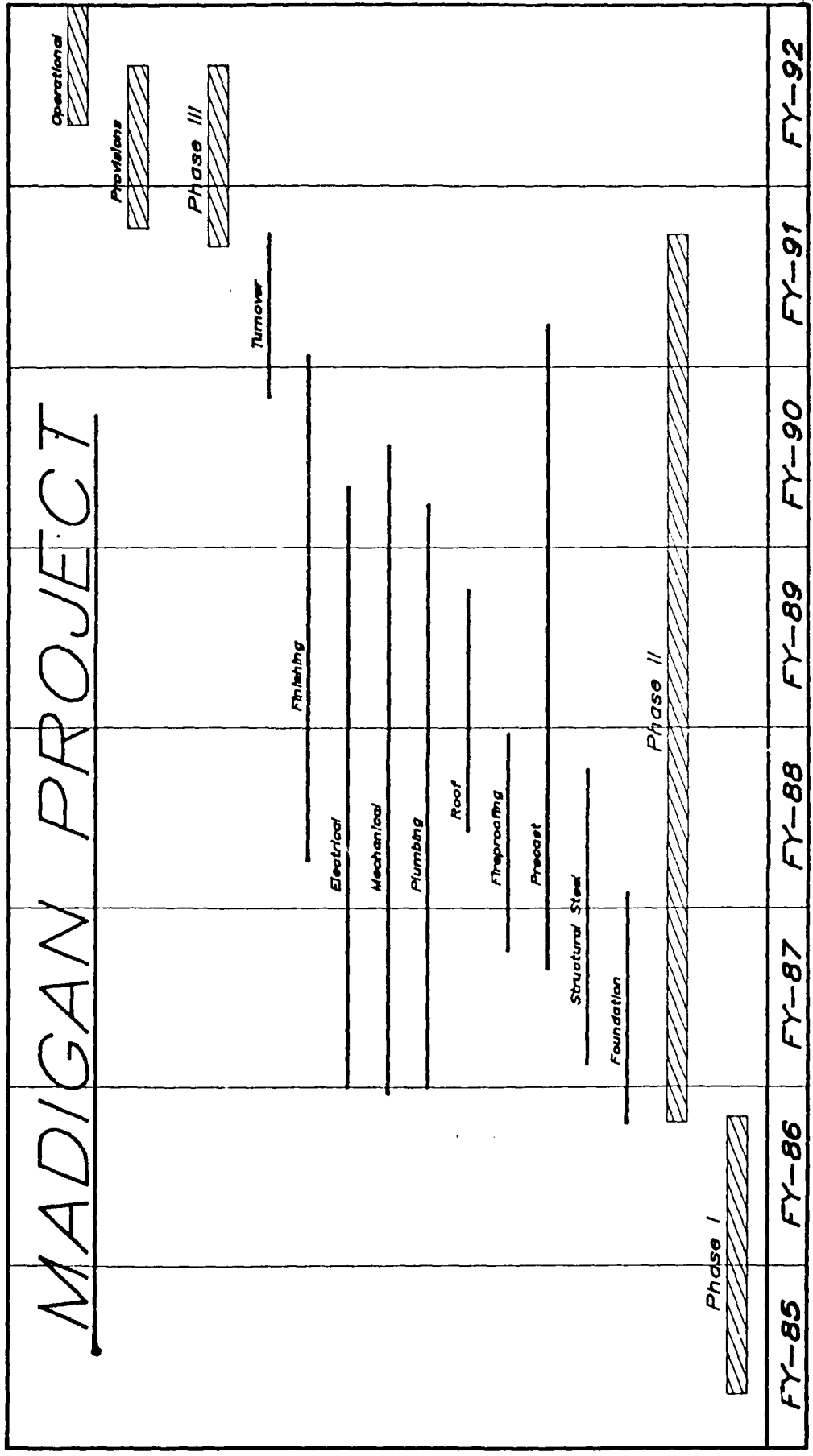
DEH, HEALTH CARE SUPPORT DIVISION  
Major Systems Maintenance Support  
Responsibility

DIVISION	DIVISION TITLE	FACILITY COMPONENT	SPC1	SPC2	SPC3	PRIOR	#	FOUR P/M	RESPONSIBILITY	SERVICE	CR	I.H. REC RSRCE #
								TRAINING				
16	ELECTRICAL	FIRE DETECTION AND ALARM	16721	0	0	URGNT	24				0	0.00 92
16	ELECTRICAL	CENTRAL CLOCK SYSTEM	16722	0	0	URGNT	3				0	0.00 93
16	ELECTRICAL	PATIENT SERVICE COLUMNS	11708	0	0	EMERG	0				0	0.00 94
16	ELECTRICAL	ROOM STATUS SYSTEM	16725	0	0	URGNT	4				0	0.00 95
16	ELECTRICAL	NURSE CALL SYSTEM (LAMP/BZR)	16761	0	0	URGNT	0				0	0.00 96
16	ELECTRICAL	NURSE CALL SYSTEM (VOICE/VIS)	16761	0	0	URGNT	0	DOL (AR420-43)		DOL (AR420-43)	0	0.00 97
15	ELECTRICAL	DOCTORS PAGING SYSTEM	16762	0	0	URGNT	0	ISC (AR420-43)		ISC (AR420-43)	0	0.00 98
16	ELECTRICAL	RADIO/PUBLIC ADDRESS SYS	16770	0	0	EMERG	0	DOL (AR420-43)		DOL (AR420-43)	0	0.00 99
16	ELECTRICAL	BROADCAST COAX CABLE SYS (TV)	16784	0	0	URGNT	0	<del>DOL (AR420-43)</del>		<del>DOL (AR420-43)</del>	0	0.00 100
16	ELECTRICAL	INTRUSION DETECTION SYSTEM	16784	0	0	EMERG	0				0	0.00 101
*** Total ***											0	0.32



APPENDIX O

NEW MAMC MAINTENANCE PLANS



### GOALS AND OBJECTIVES OF THE NEW MAMC MAINTENANCE PLAN

"To insure that DEH is fully prepared to professionally operate and maintain the New Madigan Army Medical Center upon beneficial occupancy."

Planning and preparation will be required in the following major areas:

1. Contract vs. in-house decisions
2. In-house staffing
3. Training
4. Equipment and furnishes provisioning
5. Contract development
6. Information Management Systems
7. Budget programming

### MILESTONE SCHEDULE AND DISCUSSION

This section includes a presentation of a proposed maintenance planning process in a milestone (ganttt) type format. This chart is structured to match the construction line diagram provided by the Corps of Engineers Madigan Area Office. The maintenance planning timeline was developed from the construction contractors' master schedule as well as planning documents from the Health Facility Planning Office regarding equipment provisioning and commencement dates for facility operations.

Each major element of this timeline plan has a corresponding discussion in the pages to follow.

## 1. RESEARCH

1. System Familiarity (1 October 1986-1 October 1988): A period of general education of DEH staff (primarily HCSD personnel) as to the basic scope and maintenance implications of the new hospital. This element includes:

- a. Comprehensive and detailed review of plans and specifications by DEH's Project Manager.
- b. Informal detail of DEH's Project Manager to the Corps of Engineers Madigan Area Office (MAO) and the Surgeon Generals' Health Facility Planning Office (HFPO) for review of information pertaining to the new construction. Approximate length of detail-1 month (1/2 days), spring 1988.
- c. DEH representation by the Project Manager at MAO monthly and quarterly management meetings.
- d. Periodic DEH management briefings by Project Manager and/or Corps of Engineer personnel regarding construction status, maintenance planning or other issues of interest to DEH.

2. Transfer Plan (June 1987-June 1988): Being prepared by MAO's assistant to the Resident Engineer and DEH's Project Manager, for signature by the DEH and Seattle District Engineer, this document will form the basis for future coordination efforts between DEH and MAO. This plan is oriented toward the transition phase of DEH maintenance and includes such topics as coordination of maintenance training and site visits, spare materials, testing, warranty management as well as DEH's information requirements. A draft plan is included for DEH review.

3. Contract vs In-house Criteria and Recommendation ( July 1987-October 1988): Develop and obtain management approval for specific contract versus in-house resource criteria to be used (on a system-by-system basis) in the selection process. Following approval of choice criteria a staff summary will be prepared for the Garrison Commander (to include coordination with Civilian Personnel Office, Directorate of Resource Management as well as the Hospital Commander). This document will recommend maintenance responsibility by facility system as well as provide resource estimates for contract and in-house functions.

In preparation for this staff summary, recommend the DEH or Deputy DEH and the DEH Project Manager visit recently constructed Army Medical facilities at William Beaumont Army Hospital in El Paso, Texas as well as Hospitals at Fort Carson, Colorado and/or Fort Campbell, Kentucky. These visits will allow DEH to learn first hand some of the maintenance lessons associated with start-up and operation of a new medical center. These sites have been recommended by HFPO as William Beaumont Hospital is operating under a 50/50 maintenance scenerio (contract/in-house) and the other two facilities are almost entirely contract maintenance.

Preliminary criteria as well as a table of facility systems are presented in appendix's A1 and A2 respectively, of this plan.

## II ADMINISTRATION/PROGRAM RESOURCES

4. On-Site Testing/Inspection (October 1987-March 1990) and Training (April 1990-Oct 1990): The transfer plan discusses coordination of the on-site testing whereby the DEH Project Manager will be made aware in advance of formal systems tests to allow the appropriate DEH employee to witness these tests.

Joint MAO/DEH walk-through inspections will take place on a monthly basis during this period.

The Maintenance training phase involves construction contractor sponsored on-site and classroom training sessions. The timeline is structured to allow for phased hiring concurrent with this training. All such training sessions will be videotaped for future use.

5. Manpower Justification/Approval (October 1988-October 1990) and Phased hiring (October 1990-February 1992): Following a decision regarding the contract versus in-house recommendation, Schedule X documents will be prepared for review by DRM and approval and authorization by FORSCOM. The FORSCOM response will become the basis for a restructured TDA as well as authorization to begin recruitment action for maintenance personnel. This hiring is anticipated to be accomplished in a phased manner (over a 18 month period) with supervisory personnel to be hired initially followed by mechanics, to be hired prior to the beneficial occupancy date of July 1991.

6. Contract Development, Solicitation and Award (March 1990- December 1992): Upon receipt of FORSCOM approval for manpower allocation to maintenance of New MAMC, work can begin to develop a maintenance contract for the remainder of the RPMA requirements. The objective will be to develop a fixed price contract based on operating/maintenance manuals supplied by the construction contractor and in accordance with Army Standards for preventive maintenance (modified to meet local conditions).

It is anticipated that HCSD will require technical as well as administrative support from Engineering Services Branch in development of this maintenance contract package. Specific expertise may also be utilized through the Seattle District Hospital Project Office.

Extended maintenance for automatic transport and associated lift systems has been provided for in the MCA contract and must be budgeted from OMA appropriations upon beneficial occupancy in July 1991.

7. Equipment Justification, Approval, Purchase and Setup (February 1990-February 1992): Two years is being allotted to obtain approval for modifying the equipment TDA as well as procurement and setup of fixed equipment associated with this new in-house maintenance mission. This phase is set to begin upon FORSCOM approval of the manpower Schedule X as only at this time will in-house resources be decided. Additionally, at this time an analysis of space requirements for both in-house and contract forces will be accomplished by the Project Manager and written recommendations forwarded for approval.



APPENDIX A1

## TENTATIVE IN-HOUSE VS CONTRACT CRITERIA

Recommendations for a in-house vs. contract decision should be based and justified on a set of approved criteria. In the absence of standard choice criteria, the following is proposed for maintenance decisions in the new hospital:

1. GENERAL: Upon completion of New, MAMC, the Health Care Support Division will continue to be responsible to the DEH Director for RPMA services for those facilities under the direction of the MAMC and DENTAL commanders. These facilities include New MAMC, the existing medical center, medical warehouse (bldg 9665A) medical barracks and satellite clinics (medical, dental and administrative functions).

2. CRITERIA FOR IN-HOUSE VS CONTRACT DECISIONS: The New Medical Center, with all its sophisticated facility systems, will significantly effect the maintenance mission of the DEH. It is anticipated that a well maintained medical center will require significant resources from contract means as well as in-house (government employed) staff. The challenge to management is to decide on a mix of these two functions to maximize the efficiency and effectiveness of facility support provided to MAMC. These decisions should be based on a set of criteria derived from the basic objectives of the DEH. The following is a list of criteria proposed for use as a governing "template" in this decision-making process:

a. Complex Systems: Many facility components are of such complexity that they require very specialized training and prior maintenance experience. The specialized systems which are unique on Fort Lewis to the New MAMC (such as elevators, escalators, ATS, ABC, pneumatic tube, etc) and require specialized O & M experience will probably be reserved for contract accomplishment.

b. Cost and Effectiveness: The primary consideration for those remaining systems (ie. exclude by item 2a) is to minimize cost while insuring effective service. The logical extension of this criteria leads to the expansion of existing Fort Lewis maintenance service contracts where work is similar to that already being provided (including grounds, roads, fencing, roofing repairs/replacement, glass repair, automatic doors, resilient flooring repairs, theater chair maintenance, halon 1301 fire suppression systems, grease hood/ cleaning). Other factors to be considered in making a cost analysis include: requirement to maintain a shop on-site or provide "on-call" services, and availability of competing contractors to ensure a reasonable price.

c. Physical Security: To insure physical security it is recommended that the functions of a locksmith (and other similiar security systems) for New MAMC remain in-house.

d. Reliability: A limitation of contract maintenance services is that the continuity of these services will be disrupted. This disruption can be caused by delays in administrative processing for contracting, protests, contractor non-performance, work strikes or any number of other factors. With this fact in mind, it would seem prudent to maintain an adequate well trained in-house workforce in order to insure continuity of service during these disruptions.

e. Compatibility of In-house and Contract Workforce: An in-house workforce can act as a very effective means of evaluating contractor performance to assist the quality assurance representative. By the same token, the division of responsibility must be clear, well communicated and based on a rationale which is understandable to all involved. This is necessary to insure all required services are provided without services "falling-through-the-crack" between in-house and contract accomplishment.

f. Civilian Employment Authorizations: Any proposal which involves additional civilian personnel staffing should be made with the understanding that Fort Lewis operates in a current environment of reducing civilian authorizations. Additional staffing may become available to HCSD with the upcoming DEH reorganization. (space for additional criteria)

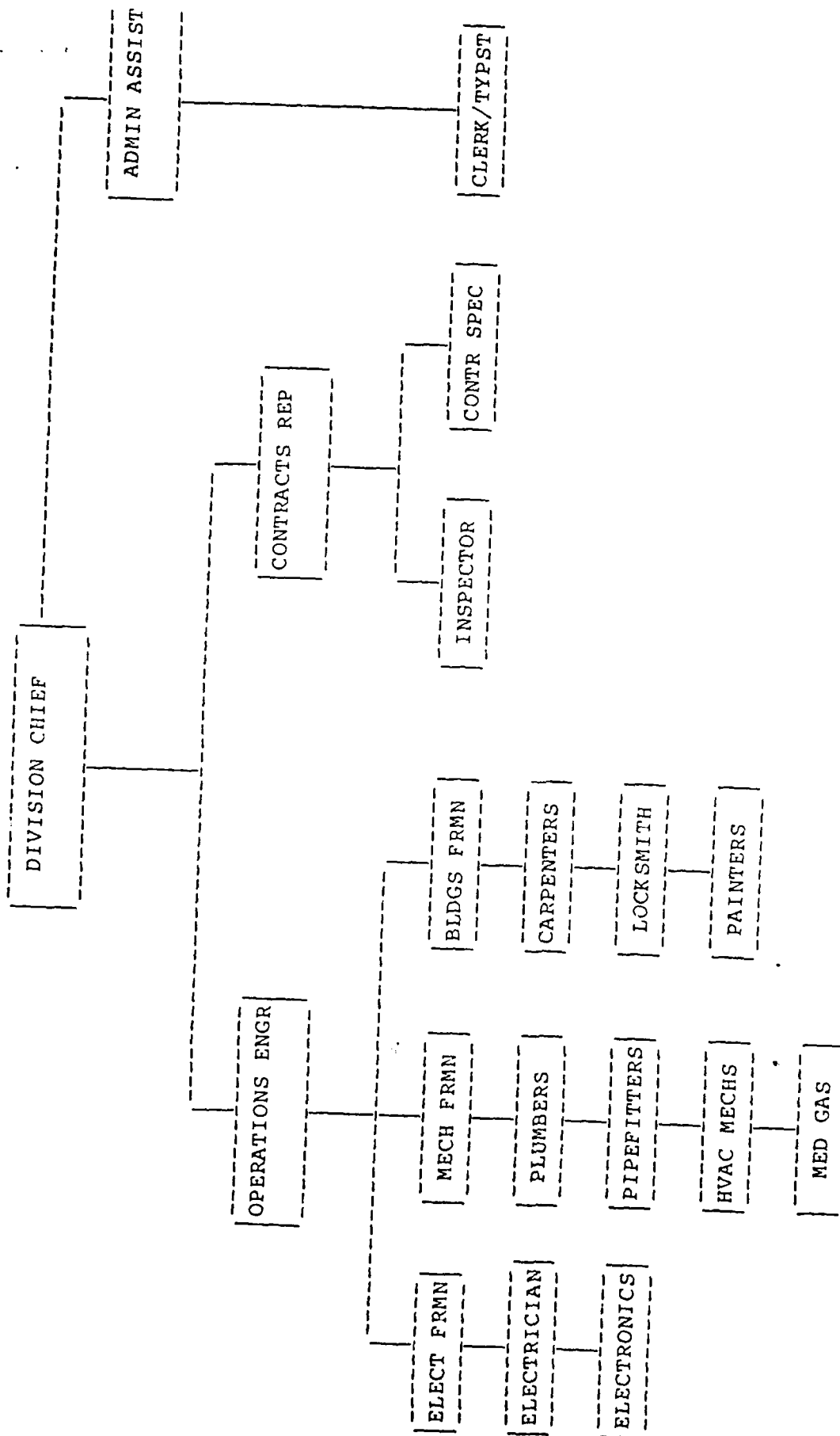
3. Maintenance Recommendations: A preliminary listing of major facility systems for the New MAMC as well as proposals for maintenance responsibility and the decision criteria follow:



## OPTIMAL HCSD ORGANIZATION STRUCTURE

Obviously an organization structure for HCSD cannot be established until decisions are made regarding in-house versus contract accomplishment of the mission. Despite this fact, the chief HCSD as well as the New Hospital Project coordinator endorse the concept of a "Balanced" organization between contract and in-house accomplishment. This scenario has the advantage of providing the flexibility inherent with an in-house workforce with expertise associated with contract service. This balanced concept enhances reliability of the maintenance effort as contract or in-house resources would be more readily available if one element were to be discontinued (such as in a minor layoff or contract default).

A "generic" organization structure under this balanced concept is provided for consideration with this document.



*Draft for Review  
Sof & Cmt*

MEMORANDUM OF UNDERSTANDING  
BETWEEN  
THE LOGISTICS DIVISION, MADIGAN ARMY MEDICAL CENTER AND THE  
DIRECTORATE OF ENGINEERING AND HOUSING, FT. LEWIS WA

**SUBJECT:** Policy on seperation of maintenance responsibility between MAMC's Logistics Division and DEH's Health Care Support Division.

**1. PURPOSE:** To develop a written understanding between MAMC's Logistics Division and DEH's Health Care Support Division (HCSD) of maintenance responsibility for all installed hospital equipment (Log Cat A and B) programmed for use in the New Medical Center. An agreement of this nature is required in order that well informed resource decisions can be made for maintenance support of the new hospital.

**2. REFERENCE:** Army guidance on the subject of this seperation of maintenance responsibility of hospital equipment is provided in HSC Regulation 750-1 (Medical Equipment Management) as well as the AR 420-43 (Electrical Services). In essence, these regulations specify that DEH is responsible for real property (installed equipment) which is further defined as that equipment which is considered integral with the structure. HSC Reg 750-1 provides a listing of medical equipment. Maintenance responsibility for equipment in the New Hospital will be as assigned as per this guidance, in the attached listing entitled "DEH Health Care Support Division New Madigan Equipment Maintenance Responsibility" (Encl 1).

**3. PROBLEM:** Conflicts have been experienced in the past and will undoubtedly occur in the future without common agreement on maintenance responsibility for certain items of equipment-in-place which support the hospital mission. The end result of this conflict is often an unacceptable delay in maintenance services for critical hospital equipment.

**4. SCOPE:** This document is to be used by DEH and MAMC staff in planning for, and implementing, the maintenance mission of the New Medical Center.

**5. AGREEMENTS:** Several systems included in the new hospital lend themselves to split responsibility. Included in this category of systems are:

a. Automatic Transport System-includes master console, guidepath, carts, automatic washer/dryer, battery charger and cart lifts. Based on the regulations cited, HCSD will be responsible for:

- (1) Master Console
- (2) Guidepath
- (3) Transporter
- (4) Cart Lifts
- (5) ~~Battery~~ Charger

AFZH-EHZ

SUBJECT: Policy on Separation of Maintenance Responsibility between  
MAMC's Logistics Division and DEH Health Care Support Division.

Bio-medical maintenance Br. will be responsible for:

(1) Carts

(2) Cart Washer

*THE HOSPITAL USER WILL BE RESPONSIBLE BATTERY CHARGING FOR HIS TRANSPORTERS.*

b. Refrigeration/freezer units:

(1) HCSD will be responsible for kitchen and fixed refrigeration units such as:

- (a) Walk-in Units (ie kitchen, pathology)
- (b) Other Kitchen Equipment (roll-in, reach-in)
- (c) Nourishment Stations (fixed)

(2) Bio-medical Maintenance Br. will be responsible for those "medical-unique" units as are typically found in the laboratory, blood bank and morgue.

(3) MAMC Property Branch will be responsible for all other small residential-type refrigerators.

c. Dishwashers:

- (1) HCSD will be responsible for kitchen dishwashers.
- (2) Bio-medical Maintenance Br. will be responsible for all units which clean medical glassware/utensils.
- (3) Property Branch will be responsible for all other dishwashers.

d. Locks: Due to the fact that HCSD employs a locksmith for door/window lock maintenance, other locks such as on narcotics/medication storage cabinets are accomplished by HCSD on a reimbursable basis. (Note: furniture locks are not maintained by DEH, but rather are the responsibility of MAMC property)

e. Equipment-Facilities Interface: For separation of maintenance responsibility purpose, the interface between equipment and facility will be assigned at the utility outlet (receptacle, medical gas, air intake, drain, etc.) or building structural element.

6. EFFECTIVE DATE: \_\_\_\_\_

\_\_\_\_\_  
LYLE WARNER  
COLNEL, MS  
Ch Logistics Div MAMC

\_\_\_\_\_  
GENE A. SCHNEEBECK  
COL, EN  
Facilities Engineers

## NEW MADIGAN OMA PLANNING REVIEW - 4TH QUARTER FY88

23 June 1988

## ATTENDEES:

Col. G.A. Schneebeek  
Mr. Bob McComas  
Mr. Barney Richmond  
Mr. Geoffrey W. Glass

## AGENDA:

1. PARR Submission (Tab A) - Enclosed is an information paper for ERMD's use with a detailed spreadsheet of all maintenance activities as well as time standards for each task. Tasks and time standards come from the following sources:

- "Maintenance Management for Health Care Facilities" of the American Hospital Association (ASHE)
- "Preventive/Recurring Maintenance Handbook" TB 420-34 (DCD)
- "Buildings Maintenance Management", General Services Administration (GSA)
- "Preventive Maintenance Procedures for Evans Army Community Hospital", Fort Carson (ECH)
- Judgement and Experience of the Health Care Support Division (LOCAL)

Also included is a utility cost estimate for full hospital operations. Demand is based on estimates from the design analysis. Unit costs for fuel and electricity are based on current or projected costs with allowances for inflation.

2. Transfer Plan (Tab B) - This is a document which has been almost a year in the making. The ambitious concept behind this document is to anticipate and address potential future coordination problems between MAO and DEH. Essentially the plan places burden on MAO for the majority of items. Issues which are still under discussion include warrantee management and training.
3. Optical disk storage of Operating and Maintenance Manuals (Tab C) - See attached information paper on this subject. In summary, HCSD recommends we no longer pursue this issue as some of this capability will be included in an upcoming maintenance automation system (MAXIMO). Additionally, the benefit vs. cost for optical storage/distribution of the remainder of information is precieved to be quite low.
4. Training (Tab D) - HCSD is coordinating on behalf of the

Installation for all maintenance training to be provided by the construction contractor on the hospital systems. The attached spreadsheet shows 1400 hours of maintenance/operator training for a total of almost 5 manyears, along with a distribution of training by Division. A formal DF to be written jointly between NMPO and HCSD will be submitted through the DEH front office prior to the 1 August deadline.

5. Status of DEH requested change orders:

- A) Modify floor finish in Plant Maintenance (VCT to concrete)- Accepted and modified.
- B) Relocate fire department connection, building 9580- Accepted and purchase order is out for bid.
- C) Incinerator emissions- Change pending final PASAPCA regulations.
- D) Cooling system for emergency generators- MAO has completed a design for encorporating a fire department connection to the end of the cooling loop to allow for emergency cooling water service to 5 generators from the adjacent fire hyudrant. DEH to provide the fire department connection for contractor installation.

6. Next Quarter:

- Begin review of contractors O&M manual submittal.
- Interview maintenance contractors and develop recommendation for in-house vs. contract workforce.
- Develop maintenance automation structure for HCSD (insure compatibility with the new hospital).
- Site visits.
- Initial work on maintenance contract. (obtain a copy of Ft. Sill statement of work).

Geoffrey W. Glass  
Project Manager, FCSD

INFORMATION PAPER

I. SUBJECT: FY91/FY92 PARR Submission-New Madigan Army Medical Center

II. MAJOR POINTS:

a. BACKGROUND:

1. New Madigan Army Medical Center is a 414 bed, 1,115,000 sf tertiary care teaching hospital scheduled for completion in January, 1991. Estimated construction cost-\$207,780,000.00, Installed equipment cost-\$75,000,000.00.

2. The existing Madigan Army Medical Center will remain occupied; divided for use by MAMC (core hospital mothballed and other functions not scheduled for occupancy in the new hospital) and Ft. Lewis. The facility will remain available as a mobilization hospital.

3. The Directorate of Engineering and Housing, Health Care Support Division will be responsible for facility maintenance of New MAMC, existing MAMC and remote medical/dental clinics.

b. MAJOR POINTS:

1. A 100% resource commitment is absolutely required to protect and insure a long and economical life of the facility, to protect the government's substantial facility investment, and to provide a quality care environment for MAMC patients, staff and visitors.

2. FY91 and FY92 projected resource requirements follow:

	FY91 (utilization rate=.55)	FY92 (utilization rate=.92)
Operations, Maintenance and Repair (K account) Appendix A	1,400.0K	2,340.0K
Utilities (J Account) Appendix B	<u>952.5K</u>	<u>1,741.5K</u>
TOTALS	2,352.5K	4,081.5K

III. STAFF COORDINATION: DEH Budget Branch provide direct coordination with Directorate of Resource Management for PARR submission.

IV. ISSUES/STAFF CONCERNS: Final decisions regarding contract versus in-house accomplishment of facilities maintenance in New MAMC are pending. This cost analysis is based on contract services and as such includes a factor for profit.

## INFORMATION PAPER

SUBJECT: FY91/92 PARR Submission-New Madigan Army Medical Center

V. RECOMMENDATIONS: Fort Lewis make a firm commitment to the quality of life and health care of its soldiers by endorsing full funding of new medical facility maintenance in PARR submission for FY91 and FY92.

Prepared by: Glass/6838/AFZH-DEZ  
1 June 88

Approved by: COL G.A. Schneebeck/3191



# O&M TRAINING REQUIREMENTS FOR NEW MADIGAN ARMY MEDICAL CENTER

SPEC #	SYSTEM DESCRIPTION	#HRS TRAINING	TRAINING DISTRIBUTION	HCSD	O&M DIV FIRE	EPSP	EST	ISC	MAMC TOTAL (USER) #DEH	TOTAL #TRNEES	DEH MNHRS	MAMC MNHRS
2731	Sewage Lift Station	8	8	5	3		1		9	9	72	
2810	Irrigation System	8	6	3	3				8	8	40	
11171	Incinerator	24	20	5	3				8	8	160	0
11172	Compactor	12	10	5	1				6	6	60	0
11173	Retort Sterilizer	16	12	4					5	5	60	0
11210	Pumps, Water, Vertical	8	8	6	2		1		9	9	72	
11400	Food Service Equipment	80	50	30					6	6	300	0
14120	Dumbwaiters (C)	4	4	5			1		7	7	28	
14210	Elevators (C) *	8	7	1	2		1		9	9	63	0
14310	Escalators (C) *	8	7	1	2		1		9	9	63	0
14510	ATS PHASE I- Operator	40	40	40			1		3	3	120	
14510	ATS PHASE II- Maint	40	40	5	3				7	7	280	
14510	ATS PHASE III- Operator	80	80	40					3	3	120	
14510	ATS PHASE III- Maint	40	40	5	3				5	5	400	
14511	Surgical Cart Lift (C)	8	7	1					5	5	144	
14520	Automatic Box Conveyor	48	44	4			1		5	5	200	0
14580	Pneumatic Tube System	48	44	4			1		6	6	264	0
14582	Outpnt Del Pneumatic	18	16	2			1		7	7	308	0
14581	Pharmacy Pneumatic Tube	18	16	2			1		5	5	112	0
15350	Natural Gas Service	8	8	3	2		1		7	7	56	0
15410	Backflow Prevention	1	1	6	3		1		10	10	10	0
15410	Oxygen System	24	22	2	3		1		10	10	220	0
15410	Nitrous/Nitrogen Sys	8	6	7			1		8	8	48	0
15410	Vacuum System	24	22	2			1		8	8	176	0
15410	Compressed Air System	24	22	2			1		8	8	176	0
15410	Oral Evacuation System	16	14	2			1		8	8	112	0
15410	Steam Hot Water System	8	8	10	2		1		13	13	104	
15501	Sprinkler System	36	36	5	2		1		10	10	104	
15502	CO2 Fire Protection	4	4	5	2		1		8	8	288	
15601	Heating Systems	40	32	7	2		1		12	12	336	
15602	Steam Generating Sys	40	32	4	2		1		11	11	256	
15650	Central Refrigeration	80	64	6	2		1		11	11	608	
15705	UG Heat Distribution	4	4	5	2		1		8	8	32	
15805	Air-Supply & Distribtn	120	120	7	2		1		8	8	960	
15806	ESCS PHASE I- Operator	44	24	7			1		7	7	303	
15806	ESCS PHASE II- Maint	24	24	5			1		7	7	168	
15806	ESCS PHASE II-Operator	24	24	5			1		5	5	120	
15806	ESCS PHASE III- Fire	24	16	5	3				3	3	72	
15806	ESCS PHASES III-Operator	16	16	7					5	5	80	
16262	Auto Transfer/Bypass	4	4	7			1		9	9	36	
16263	Diesel Engine Generatr	24	20	5	2		1		9	9	148	
16263	Load Shed/Restore Sys	80	70	5	2		1		9	9	510	
16263	LSRS Factory Training	80	80	2			1		2	2	160	
16264	Emergency Gen- Boiler	8	6	5	3		1		11	11	62	
1641	Indoor Primary Switchgr	16	14	5	4		1		13	13	158	

16415 Indoor Substation (C)	16	14	2	5	2	4	1	1	13	13	158				
16415 Electric Panelboards	4	4		7			1	1	8	8	32				
16415 Electric Switchboards	8	8		7			1	1	8	8	64				
16415 Motor Control Centers	8	8		7			1	1	8	8	64				
16415 Transformers, Dry Type	4	4	1	7			1	1	9	9	36				
16415 Voltage Regulators	4	4	2	7			1	1	10	10	40				
16415 Anesthetizing Panels	4	4		5			1	1	6	6	24				
16415 Patient Wall Units	8	8		7			1	1	7	7	56				
16415 Lighting Controls	2	2		5			1	1	6	6	12				
16721 Fire Detection/Alarm	24	24		5					10	10	240				
16722 Central Clock System	3	3		5					5	5	15				
16725 Room Status System	4	4		5					5	5	20				
16740 Telephone System	0	0		0					0	0	0				
16740 Telephone, Sys Orientn	16	16		4					4	4	64				
16740 Telephone, User	10			2					2	2	152				
16740 Telephone, Operator	40			0					0	0	20				
16740 Telephone, Plant Maint	0	0		0					0	0	0				
16740 Telephone, OutsidePnt	0	0		0					0	0	0				
16740 Telephone, Software	40	40		0					0	0	0				
16761 Nurse Call System	32	26		5					5	5	140				
16762 Doctor Paging System	10	8		2					2	2	16				
16770 Radio/Public Address	5	4		1					5	5	20				
16784 Broadband/Coax Cable	8	7		5					5	5	40				
TOTALS (# TRNG HRS)	1651	1234	166	251	5789	100	899	7	176	247	688	494	549	9397	ERR
MANYEAR TOTALS (/1700mh per yr)					3.4	0.1	0.5	0.0	0.1	0.1	0.4	0.3	0.3	5.5	ERR

# ORGANIZATION LEGEND:

SPRDSHT SYMBOL	DIRECTORATE/OFFICE	OFFICE SYMBOL
HCSD-	DEH Health Care Support Division	AFZH:DEZ
O&M DIV-	DEH Operations & Maint Division	AFZH:DE
FIRE-	DEH Fire Protect/Prev Division	AFZH:DEF
ESPD-	DEH Engineering Services Branch	AFZH:DEE
EST-	DEH Estimating Branch	AFZH:DEW
ISC-	Information Systems Command	AFZH:IM

NOTE: ASTERISK (\*) INDICATES USER TRAINING REQUIRED IMMEDIATELY PRIOR TO OCCUPANCY OF FACILITY. THIS WILL NOT CORRESPOND WITH THE TIMEFRAME FOR MAINTENANCE/OPERATOR TRAINING.

APPENDIX P

MAMC PROJECT TURNOVER PLAN

FILE:cdenturn.007

Madigan Area Office, Seattle District

and

Directorate, Engineering and Housing, Health Care Support Division

Madigan Army Medical Center  
Project Turnover Plan

Draft Copy: 16 June 1968

---

Gene A. Schneebeck  
COL, EN  
Directorate of  
Engineering and Housing

---

Robert A. Rowe  
Area Engineer  
Madigan Area Office  
USAED Seattle

Madigan Army Medical Center  
Project Turnover Plan

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Filename:CDEHURN.007

Appendices

- A- Equipment-in-Place Data Sheet Example
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- F- Summary of Responsibilities Chart
- G- ECP Summary Report, Phase III Procedure Letter, Phase III Follow-on Contract Report.
- H- Maintenance Support Responsibilities (DEH effort)
- I- Paragraph 17.1.7, Specification Section 01001
- J- Warranty Flow Chart (DRAFT)

DISTRIBUTION:

Filename: CDEHTURN.007

1. General. The new Madigan Army Medical Center (MAMC) located on Fort Lewis Washington, is a state of the art, 414 bed, teaching hospital. Acceptance of the completed facility is the responsibility of the Corps of Engineers' Madigan Area Office (MAO). Personnel representing the New Madigan Project Office (NMPO) of the Office of the Surgeon General (OTSG), personnel representing the Fort Lewis Directorate of Engineering and Housing (DEH), and personnel representing the Fort Lewis detachment of the United States Army Information Systems Command (USAISC) are expected to participate in the inspections and to witness the performance tests as the inspections and tests apply to their function. The DEH has the responsibility of operating and maintaining the facility and most of its systems after acceptance of the facility by the Government. The operation and maintenance of the telephone systems will be the responsibility of the USAISC detachment at final acceptance. The complexity and size of the facility requires that formal planning take place for the transition from the construction phase to the operation and maintenance phase. The Health Care Support Division (HCSD) of DEH will serve as the primary point of contact for all interface activities between DEH and the MAO. All transfer information and documentation will be sent directly to HCSD for final disposition, except the final DD Form 1354 which will be sent directly to DEH, Real Property, for signature.

2. Purpose. The purpose of this plan is to identify, discuss and reach a mutual understanding of the procedures for the transfer of the MAMC facility from the Seattle District Corps of Engineers, MAO (construction phase) to the Fort Lewis DEH (operation and maintenance phase). For the successful inspection, acceptance and transfer of this facility to the DEH for proper operation and maintenance management will require a total commitment of all governmental agencies and personnel associated with this project. This plan is to provide information of future operations and maintenance activities of MAMC and to outline the coordinated efforts required of both the Seattle District and Fort Lewis DEH.

3. Applicability. This plan applies to all MAO and DEH personnel associated with the MAMC project. Coordination of this plan with the OTSG's Health Facility Project Office (HFPO) has been made when applicable. The intent of this plan is to produce a standard set of operating procedures and produce an "all source" reference document. Appendix F, Summary Responsibility Chart, lists the requirements of this plan and the action office associated with a required responsibility.

#### 4. Periodic Site Visits.

a. In order to build up institutional knowledge for the operation and maintenance phase, it is imperative that DEH maintenance supervisors and personnel visit the site periodically to become familiar with construction of the facility and its complex systems. A formal, monthly site visit is scheduled for the third Thursday of every month and coordinated between the Chief, Construction Branch and the Project Manager, HCSD. The scope and focus of each site visit is agreed upon by each office before conducting the joint site visit. Additional formal or informal site visits for HCSD personnel or other interested parties can be scheduled on a case by case basis with the need for these visits varying with the

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intensity of the construction effort.

b. It will be the responsibility of DEH, HCSD to keep abreast of the current and future construction status and to make sure that the necessary Government personnel visit the facility to observe those activities which could provide critical information during the operation and maintenance phase. The point of contact for scheduling site visits will be the Chief, Construction Branch, MAD, Mr. Ron Rowland.

\*\*\*WILL THESE BEGIN WITH THE SIGNING OF THIS DOCUMENT OR IN '89?\*\*\*

#### 5. Systems Testing, Interim Final Inspections, Facilities Acceptance.

a. General. During the construction phase, the Contractor will reach a point where the facility is complete to the extent that it will become the Government's responsibility under the Contract to inspect and test the facility and its systems for acceptance.

#### b. Acceptance Schedule.

(1) The group of rooms listed in Paragraph 17.1.7 of Specification 01001 (see Appendix J) are scheduled for Beneficial Occupancy approximately 180 days before the remainder of the facility. A partial DD Form 1354 (The document used for transfer and acceptance of Military Real Property) is required for this property transfer. The DEH will be responsible to maintain these areas upon acceptance. This work is identified in the Contractor's Network Activity Schedule (NAS) as Activity 899980. Acceptance testing and inspection of the early occupancy areas is estimated to require two (2) months.

(2) Acceptance of the remainder of the facility is to take place on one date. The acceptance testing and inspection phase of this portion of the facility will take a minimum of six (6) months of intensive work to complete. During this period it will be the Contractor's responsibility to perform all required maintenance. This work is identified in the Contractor's NAS as activity 899990.

(3) There are two other completion dates established by the Contract for certain testing, training and maintenance type effort for the Automated Transport System (ATS) Phase II and III. These items will require further inspection and acceptance testing after final acceptance of the building by the Government.

c. Meetings. The Area Engineer will hold weekly scheduling and coordination meetings. Representatives of the Contractor, the MAD, the HFPD and DEH are asked to attend. All acceptance inspections and tests are scheduled and coordinated during these weekly meetings. The Area Engineer expects that all participants commit the required resources



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to meet the schedules established. This includes having the correct personnel at the correct inspection or test on time and ready to accomplish the assignment from the beginning to its conclusion.

d. Tests. Tentative test inspection and training dates are in the project NAS and DEH, HCSD has a copy of of this summary.

e. Documentation. As they become available, MAO will provide HCSD with copies of all final inspection results and approved test reports. This documentation will be transferred along with all of the other documentation required by this plan around beneficial occupancy of the facility. Copies of the approved test reports are furnished to DEH, HCSD as they become available.

#### 6. Contract Training of Government Personnel.

a. General. Technical Specification 01001, paragraphs 3.3 and 19 of the Contract specify the Contractor's and Government's responsibilities to train government personnel on the MAMC systems and equipment. Training of DEH personnel on MAMC systems is critical to the successful transfer and efficient operation of the facility.

b. Meetings. Coordination for when and where training is to occur will be done during the weekly coordination meetings between MAO and DEH, HCSD. DEH, HCSD will insure that timely notification of the proper personnel that will receive training takes place and that these personnel are available at the time and place scheduled during the weekly meeting. The Contractor will have available, in sufficient quantities so each participant will have a copy, Operation and Maintenance (O&M) manuals for use as the textbook during the training. If there is follow-on or advanced training to be given on a certain system, the same personnel will attend this training to build on the basic instruction previously conducted.

c. Training Plan. The Contractor will submit his training plan to the Government for approval. This plan will be coordinated with the HCSD. MAO will notify DEH by letter identifying the date, time and location of formal training. Appendix D is a sample of the MAO produced "Contractor Training Status Report" which will be used to track the contractually required training to be conducted by the Contractor. Documentation of each training session will include the date, time subject(s) covered and personnel in attendance.

d. Documentation. The Contractor is required to audio-video record all field instruction training sessions and provide the Government with a copy of each session (It is the interpretation of the Government that the term "field" includes any training conducted at the project site regardless whether the training is conducted in a classroom environment or in the hospital as hands-on equipment training). The tapes and the recording

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equipment will become the property of the Contracting Officer. The Seattle District will reproduce a copy of all tapes and provide a copy of each tape to DEH, HCSD. HCSD will, in turn, transfer a copy of all tapes pertaining to the telephone system to the Fort Lewis USAISC. The tape player will be turned over to the DEH when the training required by the contract is completed.

#### 7. Property Transfer Documents.

a. The preparation of the property transfer documentation will be a coordinated effort between the MAO, HCSD, HFPD and MAMC Logistics offices. The following regulations outline the requirements for the property transfer documentation necessary for the transfer of the MAMC project.

(1). AR 415-10, Military Construction-General. This regulation sets forth the provisions requiring the submission of DD Form 1354.

(2). AR 415-28, Department of the Army Facility Classes and Construction Categories (Category Codes). This regulation lists the uniform construction category coding for use with DD Form 1354.

(3). AR 420-17, Real Property and Resource Management. This regulation specifies requirements relating to accounting for real property.

b. Per reference 9a(1), the HCSD requires the following documentation:

(1). DD Form 1354 completed IAW appendix B of AR 420-17. An example of which is provided by DEH, Real Property Branch.

(a). Preparation of form: MAO

(b). Distribution: 1-Original and 1-copy to DEH, Real Property Branch; 1 copy to DEH, HCSD. The original copy will have original signatures by the Area Engineer and the Commander, DEH or his designated representative. This copy is retained by DEH, Real Property Branch, as the Contract Record Copy. DEH, Real Estate Branch will return the other copy with original signatures, if requested, to MAO.

(2). DD Form 661. A comprehensive listing of all equipment-in-place necessary to complete DD Form 661 includes:

(a). Equipment description, make, model, manufacturer, size or capacity and location (room number).

(b). Cross reference to drawing number, specification section, submittal number and operations and maintenance manual number if applicable.

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(c). Preparation of form: MAO

(d). Distribution: Original to DEH, Real Property Branch, 1 copy to DEH, HCSD.

(3). DA Form 2877, completed IAW appendix C of AR 420-17 for each of the following:

(a). MAMC structure and interior utilities.

(b). The new boiler plant adjacent to building 9580.

(c). New surfaced road and parking areas.

(d). Each individual exterior utility distribution system. (To include water, sewer, storm drain, steam, gas and electrical systems).

(e). Land associated with construction of MAMC. (Other than provided previously in the initial site package).

(f). Preparation of form: MAO

(g). Distribution: Original to DEH, Real Property Branch, 1 copy to DEH, HCSD.

#### 8. Operations and Maintenance Manuals (O&M).

a. The HCSD is given an opportunity to review a copy of the Contractor's initial submittal of the O&M manuals. A copy of the O&M submittal will be sent to DEH for review with a 45 day suspense date. All submittals dealing with the telephone system will be reviewed by the USAISC. POC for these matters is Mr. Melvin Hertzberg at 967-6071. All review comments by DEH, HCSD and USAISC must be returned to MAO in writing. Review of the submittal is essential to determine if the submitted manuals meet the specification criteria and are understandable by those who will use them. The Contract allows the Government 60 days for review of each O&M manual. Therefore, it is imperative that close coordination exist between MAO, HCSD and USAISC during this review period.

b. An approved, final copy of the O&M manuals covering all equipment and systems is provided to DEH, HCSD by MAO upon final acceptance of the entire facility. HCSD will, in turn, transfer all O&M manuals pertinent to the telephone system to the Fort Lewis USAISC.

#### 9. Keys.

a. The DEH, HCSD will sign a hand receipt for all keys for MAMC. Specification Section 08700, paragraphs 7 and 17.1 explains the number of sets of keys and key control storage systems that the Contractor must

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provide.

b. The establishment of a key control turnover team is necessary and should consist of at least one representative each from the Contractor, NMPO, MAMC Provost Marshall (key control office), MAO and DEH, HCSD. Each key will be tried in each lock as the Contractor changes the operational cylinder for the construction cylinder. If the key operates the operational cylinder correctly, then the key is transferred to the representative of HFPO and at the end of the day the MAMC Provost Marshall representative signs the hand receipt for all of the keys received that day. Each member of the team will receive a copy(s) of the daily hand receipt(s). Construction cylinders are retained by the general contractor. The lock maintenance system is transferred to HCSD at the same time as the key transfer to the MAMC Provost Marshall.

#### 10. Contractor Furnished Material.

a. Specification Section 01751, Spare Materials and other technical requirements of the Contract, requires the Contractor to provide the Government with certain material and tools.

b. Once delivered, the Contractor will transfer the material to the Contracting Officer who will turn the material to the DEH, HCSD using DD Form 1149 (Requisition and Invoice/Shipping Document). The DEH, HCSD will provide the MAO with a copy of DA Form 1687, Notice of Delegation of Authority-Receipt for Supplies identifying those individuals authorized to receipt for the materials and tools. Deliveries will be coordinated through an authorized representative of DEH, HCSD in building #9965, MAMC for escort to the final storage site on Ft. Lewis. Storage and accountability for the spare material will be the responsibility of the HCSD. Spare material received for the MAMC project is not to be used for other structures or facilities located on or off Fort Lewis.

c. Appendix B of this plan lists the material or tools (with the appropriate quantities/units of issue) that the Contractor will provide to the HCSD.

#### 11. Specifications, Changes and Engineer Change Proposals.

The MAO will provide one set of project specifications with amendments, all contract modifications, and all Engineer Change Proposal (ECP) files to DEH, HCSD upon completion of the project. These files are archived in boxes which hold standard legal size folders.

HFPO maintains a copy of all MAMC activity inquiries and the disposition of action on them. Those which have enough merit will become ECP's, the rest, along with the reason for disapproval, will be filed for future reference. All of these files (both ECP'S AND ACTIVITY INQUIRIES) are maintained by HFPO and can be turned over to the DEH at the end of the

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project.

Appendix B contains Madigan Area Office Memorandum No. 9, titled, Procedures for Phase III (Follow-on/Retro-fit) Work Items. This outlines the Intensive Management Plan (IMP) ECP process and discusses the planning and execution of Phase III of the New Madigan Army Medical Center. Appendix B contains the MAO ECP summary report and the new CENFSEN-MC Phase III follow-on contract summary report.

### 12. Submittals.

The record copy of all submittals and two copies of the Madigan Area Office submittal register program (in the form of standard 5.25" floppy diskette), database and program documentation is provided, at BOD, to DEH, HCSD by MAO for future use or archival purposes.

### 13. Warranty Management/Enforcement and Maintenance.

**\*\*NOTE:** This approach had the approval of both Mr. Rowe and COL Schneebeck at the last montly meeting (26 May 1988), however, this concept has not been fully staffed nor has the method of funding been finalized.\*\*

DRAFT

\*\*\*\*\*

a. General. Warranty management upon acceptance is a joint DEH/MAO responsibility with MAO ultimately responsible for its effective implementation. As such, both offices will dedicate a person(s) to act as warranty coordinators. These personnel will have had personal involvement during construction of the facility. Appendix K contains the warranty flowchart showing the responsibilities of each office and the documentation requirements to accomplish this effort. Joint MAO/DEH warranty inspections of the entire facility are scheduled at 4 and 9 months after BOD.

b. Warranty Response Time. Some of the major systems have specific response requirements. These response requirements are based on the hospital's need for that system. Upon DEH/MAO determination that a defect is a warranty issue the contractor is notified and must respond to these calls within a reasonable time.

c. Maintenance During Construction. Preventive maintenance of all systems used by the Contractor during construction (e.g. HVAC systems, lighting, etc.) is accomplished by the Contractor before acceptance of the facility. For those systems that include expendable components the Contractor will turn them over to the Government in an "as new" condition except as provided for in the contract under Supplementary Requirement No.

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27 (SR-27), USE OF INSTALLED FEATURES. For such items as HVAC filters, etc. the Contractor will be required to install replacement components prior to final acceptance or will be allowed to provide one-for-one replacements directly to DEH for installation at some later date when the installed component is fully exhausted.

d. Follow-on Maintenance Included With The Construction Contract. In the event that DEH chooses to fund follow-on maintenance provisions, the Seattle District will provide an on site Representative of the Contracting Officer (RCO) to administer and inspect these contract provisions.

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#### 14. Early Occupancy/Transfer and Project Security.

a. Supplementary Requirement 17.1.7, Early Occupancy, (Appendix J) identifies areas turned over to the Government 180 days before the expected completion of the work required in Special Clause SC-1.1. All work in the spaces listed in the Contract shall be complete except for the communication, telephone, and fire alarm system testing. All utilities shall be functional in the areas accepted by the Contracting Officer.

b. DEH, HCSD has the responsibility for normal operation and maintenance of all early occupancy areas. Only those items covered under the warranty provisions, the maintenance agreements within the contract, or latent defects in construction will be the concern of the Contractor.

c. Physical Security: Security of early occupancy areas is the responsibility of OTSG and is managed by HFPO in coordination with the MAMC Provost Marshall Officer. DEH Fire Protection and Prevention Division will be advised of all security plans to maintain an appropriate level of Fire Safety within the facility.

\*\*\*\*\*IN JUNE 1988 A MAJ MAESTAS, 967-6914, OF THE RESOURCES MANAGEMENT DIVISION, MAMC, WILL BECOME THE HOSPITAL'S TRANSITION COORDINATOR. \*\*\*\*\*

#### 15. Construction Deficiencies at Beneficial Occupancy.

a. As part of the requirement for preparing DD Form 1354, all outstanding construction deficiencies known at the time of the facility transfer are recorded on DD Form 1354 transfer document.

b. As correction of the deficiencies occur, MAO will keep DEH, HCSD advised of the status of the deficiencies.

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#### 16. As-Built Drawings.

a. At or near the presentation of the DD Form 1354 to the DEH for signing, a copy of marked up prints will be given to the DEH, HCSD for use until the completed "as-built" drawings are ready for transfer. The Seattle District Medical Facilities Unit is studying the feasibility of digitizing the as-built information (drawings and data) for storage on electronic medium.

b. DEH, Engineering Services Branch (ATTN: Mr. Law) will receive one mylar reproducible copy of all "as-built" drawings from the MAO at the completion of the project.

#### 17. Permits and Accreditation.

\*\*\*\*\*

\*\*NOTE: DEH, HCSD will obtain all necessary permits for equipment and systems before the project's BOD or the commencement of hospital operations. Separate permits required for hospital operation include air quality (incinerator) and safety (elevators). Other permits (e.g. water quality, radiation, etc.) are added, as required, to the blanket installation permits already in force. Upon written request, MAO will assist DEH, HCSD and Utilities Division in application for the proper permits. The HFPO will be responsible for obtaining Hospital accreditation through the Joint Commission on Accreditation of Hospitals.

\*\*\*\*\*

## ENGINEERING CHANGE PROPOSAL LIST

05/23/88

PC # Description	Case Mod #	S R	ECP Estimate	ECPW To RE	To HFO	HFO Action To MPSEN	Su MPSEN	Remarks
LEGEND	LEGEND	LEGEND	LEGEND	LEGEND	LEGEND	LEGEND	LEGEND	LEGEND
Source Codes and Descri:	R=Resident Office	H=HFO	D=Def, Ft Lewis	E=MPSEN, Engineering	O=Other (specify)			
Reason Codes and Descri:	1=Des Def-No AE Action	2=Des Def-Investigate	3=Design Def-AE Action	4=New Req,Criteria,etc	5=Contract Option			
6=Title 11,Other Costs	7=Differing Site Cond	8=Value Engr Change	9=Admin Change	A=User Change	D=Delay-Strikes, etc			
E=Delay-Weather	G=Corrections to GFE	L=Miscellaneous	Q=Variations in Quant.	S=Suspension of Work	V=Variations in Design			
HFO Action Codes & Desc:	A=Approved	X=Disapproved	D=Deferred	*=See Remarks	=<< No Action >>			
H=Hold								
4 Change Sonic Cleaner	13	H A	2,000.00	1 07/11/86	09/24/86	09/25/86	A	NTP issued
2 Provide Flagpoles		H A	21,423.00	2 07/18/86	09/24/86	09/25/86	D	Canceled/Deferred to Phase III
3 Delete Shelves M1990, 1991, etc.	84	P00000	-3,000.00	3 08/13/86	09/24/86	09/25/86	A	Settled, preparing mod
13 Delete Natural Gas Outlets	7	P00016	-800.00	4 10/07/86	11/11/86	12/03/86	A	Complete
14 Add RO Water and Drain	7	P00016	4,200.00	5 10/09/86	11/13/86	12/03/86	A	Complete
15 Cardio/Pulmonary Changes	7	P00016	-1,200.00	6 10/09/86				Item 1=A complete, Items 2&3=X
16 Revision to Phys Ther Clinic		H A	-1,500.00	7 10/17/86				Disapproved-Canceled
17 OR Door Changes	7	P00016	-1,500.00	8 10/22/86				Complete
18 Labor/Delivery Changes		H A	-210.00	9 10/22/86				Canceled/Deferred to Phase III
19 Allergy/Immunization Expansion	26	H A	-0,398.00	10 10/22/86				NTP To Contr.
20 Additional Recovery Locations		H A	3,200.00	11 10/22/86				Complete
21 Add Sink and Counter	7	P00016	2,586.00	12 10/24/86				Proposal received
22 Delete Interview Room	23	H A	-1,175.00	13 10/24/86				Canceled/Deferred to Phase III
23 Revisions to Rm G-55-23		H A	6,326.00	14 10/24/86				Item 1=X, Item 2=A Complete
24 Changes to Social Work Service	7	P00016	-121.00	15 10/24/86				Disapproved-Canceled
25 Pediatrics Clinic Changes		H A	5,228.00	16 10/24/86				NTP Issued
26 Pediatrics Clin Treatmt Rm Ch		H A	-3,000.00	17 10/24/86				Disapproved-Canceled
27 Changes to GFE	11	H A	-75,000.00	18 10/24/86				Complete
28 Physical Medicine Changes		H A	-4,437.00	19 10/24/86				Item 1 = A, Items 2&3 =X, NTP Issued.
29 Convert Room G-68-19		H A	600.00	20 10/24/86				Disapproved-Canceled
32 Emer. Power for Infant Transp	7	P00016	450.00	21 11/04/86				Complete
33 Revins to Toilets & Chest Rms	22	H A	-150.00	22 11/04/86	12/04/86	12/28/86	A	Item 1 = A, Items 2&3 =X, NTP Issued.
35 Delete Dictation Booth	7	P00016	-4,000.00	23 11/13/86	06/08/87	12/03/86	A	Complete
36 Child Care Waiting OB/GYN		H A	0.00	24 11/14/86	06/09/87	12/28/86	X	Disapproved-Canceled.
125 Soiled Utility Rm-Emergency Rm	26	H A	300.00	25 05/07/87	05/15/87	05/28/87	A	NTP To Contr., Revised ECP-25 Original is in PC 34
37 Control Doors PED Nursing Unit	23	H A	0.00	26 11/17/86	/	12/28/86	A	Item 1 = X, Item 2 = A.
38 Revisions to Urology Clinic	23	H A	0.00	27 11/19/86	/	12/28/86	A	Items 1&2 = X, Items 3,4&5 = A
39 Hospital Grade Receptacles		H A	30,000.00	28 11/21/86	06/10/87	02/26/87	D	Canceled/Deferred to Phase III
54 Re-thermalization Food Prep	29	H A	-10,000.00	29 12/05/86	06/12/87	05/28/87	A	Proposal received
55 Locks for Nurses	16	P00010	48,000.00	30 12/05/86	02/25/87	12/28/86	A	Complete; Locks deferred to Phase III.
102 Substitute Burn Tanks Rm1-25-6	11	H A	-5,000.00	31 02/25/87	03/09/87	02/26/87	A	NTP Issued 3/14/87.
64 TV Bracket Backing Plate	22	H A	8,000.00	32 12/17/86	12/23/86	02/26/86	A	NTP Issued
74 Casework, Rm G-23-17	13	H A	-10,000.00	33 12/29/86	02/24/87	02/26/87	A	Approved, NTP issued
75 Hematology/Oncology Changes		H A	12,000.00	34 01/13/87	04/09/87	05/20/87	X	Disapproved-Canceled.



## ENGINEERING CHANGE PROPOSAL LIST

05/23/88

PC # Description	Case Mod #	S R	ECP Estimate	ECP#	To RE	To HFO	HFO Action To NPSEN	Su NPSEN	Remarks
31 Audio Booth Change	21	H A	12,000.00		35	01/14/87	04/28/87	05/28/87 A	01/20/87 04/27/87 / / NTP Issued, Partially Approved See RFP Scope of Work.
73 ETO Visual Alarms		H A	16,000.00		36	07/21/86	02/25/87	02/26/87 D	/ / / / Canceled/Deferred to Phase III Originally CR-006
85 Outpatient Pharmacy Change	26	H A	-4,000.00		37	01/20/87	02/03/87	05/28/87 A	/ / / / NTP To Contr.
84 Inpatient Pharmacy Change	29	H A	15,000.00		38	01/20/87	02/02/87	05/28/87 A	01/27/87 02/19/87 / / / / RFP To Contr.
88 Nursing Education Changes	26	H A	-1,900.00		39	01/26/87	03/26/87	05/28/87 A	/ / / / NTP To Contr.
89 Occupational Therapy Changes		H A	4,400.00		40	01/26/87	03/27/87	05/23/87 D	/ / / / Canceled/Deferred to Phase III
59 Add Patient Monitors		H A	20,000.00		41	02/12/87	02/24/87	05/28/87 D	/ / / / NTP Issued.
100 BMO Changes	22	H A	15,000.00		42	02/12/87	03/02/87	02/26/87 A	/ / / / Disapproved-Canceled.
101 Optometry Eye Lane Change		H A	15,000.00		43	02/18/87	03/04/87	05/28/87 X	02/25/87 / / / / Issued As Clarification by SL#0813, Not In A Case.
235 Clarify Room Status System		H A	0.00		44	03/16/87	03/16/87	03/16/87 A	/ / / / Canceled/Deferred to Phase III
109 Room Status System Consistency		H A	25,000.00		45	03/23/87	/ /	12/03/87 X	03/26/87 04/27/87 04/25/87
115 Changes to Local Area Paging	29	H A	2,500.00		46	03/25/87	04/09/87	05/28/87 A	/ / / / Proposal received
118 Wall & Bumper Guard Changes		H A	27,000.00		47	04/09/87	06/10/87	05/28/87 D	/ / / / See PC-79 Also.
119 Delete O2 & NO Manifolds	26	H A	-5,000.00		48	04/10/87	05/15/87	05/28/87 A	04/15/87 05/12/87 05/06/87
128 Add Closed Circuit TV @ Chapel		H A	0.00		49	05/06/87	06/04/87	05/12/87 D	/ / / / Canceled/Deferred to Phase III
126 Add Sinks to Satellite Pharm	29	H A	20,000.00		50	05/11/87	05/15/87	05/28/87 A	/ / / / Proposal received
127 Changes to Mail Room	29	H A	1,000.00		51	05/13/87	05/22/87	05/28/87 A	/ / / / Proposal received
129 Same Day Surgery Patient Sup.	38	H A	30,000.00		52	05/18/87	06/05/87	08/05/87 A	/ / / / Relocate P4002 shown on Sketch
136 Power & Lighting for Cart Wash		H A	2,000.00		53	05/27/87	06/12/87	05/28/87 D	/ / / / Items 1-3 & 5=A, Item 4=X
139 QA, Adjutant & Clinical Change	38	H A	4,000.00		54	06/03/87	06/11/87	08/05/87 A	/ / / / Canceled/Deferred to Phase III
141 Add Automatic Door @ 1-35-C7	58	H A	3,500.00		55	06/12/87	06/24/87	02/16/88 A	/ / / / Action Changed to Approved By RE, RFP to Contr.
142 GI Endoscopy Center Changes	63	H A	-3,000.00		56	06/16/87	06/24/87	12/03/87 A	/ / / / RFP to Contractor
144 Delete M0400/M0500, Rm 1-28-10	41	H A	-5,000.00		57	06/18/87	06/25/87	08/05/87 A	/ / / / Added Portions Deferred Phil
145 Utilities for X3350	62	H A	4,500.00		58	06/24/87	07/14/87	12/03/87 A	/ / / / NTP issued
146 Pediatric Playroom Sink		H A	0.00		59	06/24/87	/ /	08/05/87 X	/ / / / Preparing RFP.
148 Separate access for Rec. Servc	41	H A	0.00		60	06/26/87	/ /	08/05/87 A	/ / / / Disapproved.
149 Medical Claims JAGS		H A	4,000.00		61	06/26/87	/ /	08/05/87 X	07/02/87 08/28/87 07/25/87
156 BMO Outlets for Nursery	62	H A	1,960.00		62	07/14/87	08/17/87	12/03/87 A	/ / / / ECP Approved, NTP issued
157 Nuclear Medicine Changes	64	H A	20,000.00		63	07/23/87	08/03/87	12/03/87 A	/ / / / Disapproved.
158 Surgical Clinic Changes	63	H A	0.00		64	08/05/87	/ /	12/03/87 A	/ / / / RFP issued
159 Hematology/Oncology Changes	63	H A	0.00		65	08/11/87	09/11/87	12/03/87 A	/ / / / RFP to Contr.
160 Required Pediatric Deletions	63	H A	0.00		66	08/13/87	08/18/87	12/03/87 A	/ / / / RFP to Contractor
172 Change Casework to SS G-5-10, 29		H A	12,000.00		67	08/31/87	10/05/87	12/03/87 X	/ / / / Disapproved-Canceled
173 New Linen Area Door Changes	63	H A	2,000.00		68	08/31/87	09/24/87	12/03/87 A	/ / / / RFP to Contractor
170 Sign System Deletions	60	H A	-81,690.00		69	09/10/87	09/16/87	12/03/87 A	/ / / / RFP to Contractor 1/15/88
185 Snock/Trauma Changes	56	H A	0.00		70	09/18/87	/ /	12/03/87 A	/ / / / Approved, Need RFP
186 Radiology Daylight Processing	52	H A	0.00		71	09/18/87	03/01/88	09/24/87 A	/ / / / RFP issued, Proposal Analyzing Proposal.
174 Nurse Call Changes-OR	62	H A	9,000.00		72	09/24/87	11/30/87	12/03/87 A	/ / / / RFP issued.

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## ENGINEERING CHANGE PROPOSAL LIST

05/23/88

PC # Description	Case Mod #	S R	ECP Estimate	ECP#	To RE	To HFPO	HFPO Action To NPSEN	Fr NPSEN	Su NPSEN	Remarks
183 Changes to Room Status System	62	H A	6,000.00	73	09/25/87	10/26/87	12/03/87	A	/ / /	RFP Issued.
182 Change PSE#1 Elevator Controls	62	H A	2,500.00	74	10/09/87	10/21/87	12/03/87	A	/ / /	RFP Issued.
179 Red Cross Phone & Storage Chgs	45	H A	800.00	75	10/13/87	11/30/87	11/24/87	A	/ / /	Approved By HFPO, Issuing RFP.
187 Delete Bulk ATS Stores Sub-Sys	61	H A	-20,000.00	76	10/21/87	11/19/87	12/03/87	A	/ / /	RFP to Contractor 1/15/88
195 Hardware Changes	49	H A	4,825.00	77	10/22/87	/ / /	/ / /	A	/ / /	Proposal Received, Part Approv Part Deferred.
188 Pneumatic Tube Computer Contr.		H A	0.00	78	10/22/87	/ / /	12/03/87	A	/ / /	Approved
189 ATS Contr. Console & CCTV Syst		H A	4,500.00	79	10/22/87	/ / /	12/03/87	A	/ / /	Approved, Need RFP, Relocate Console to Rm. G-37-1.
194 ABC Display Panel & Comp Contr		H A	4,500.00	80	10/22/87	/ / /	12/03/87	A	/ / /	Approved
196 Dictating System, Rm. 1-95-1		H A	12,000.00	81	12/01/87	01/06/87	12/03/87	D	/ / /	Canceled/Deferred to Phase III
200 Delete VCT in Rm.s G-23-8 & 21	74	H A	-5,900.00	82	12/21/87	03/01/88	/ / /	A	/ / /	RFP Issued
207 Telephone Changes		H A	0.00	83	01/26/88	01/28/88	/ / /	D	/ / /	Requested by HFPO to be accomp lished in Phase III
208 Cysto/IVP Room		H A	0.00	84	01/26/88	01/28/88	/ / /	D	/ / /	Requested by HFPO to be accomp lished in Phase III
211 Revise Post Office Rm. G-98-10	60	H A	900.00	85	02/05/88	02/16/88	02/12/88	A	/ / /	Settled, Preparing Mod.
220 ATS Cart Wheel Change		H A	50,000.00	86	03/01/88	03/04/88	03/08/88	A	/ / /	Approved
222 Flow Cytometer Room	74	H A	6,021.00	87	03/07/88	03/11/88	03/08/88	A	/ / /	Delete Door G-48-5A = A, Other Items Deferred to Phase III.
230 Change Dining Rm Floor Finish	81	H A	0.00	88	04/07/88	04/15/88	04/07/88	A	/ / /	RFP Issued, Awaiting Proposal.
231 Simulator Room Sink & Casework		H A	0.00	89	04/07/88	04/15/88	/ / /	/ / /	/ / /	Cost & Impact Est. To HFPO For Approval.
244 X-Ray Shunt Trip Breakers		H A	10,000.00	90	04/22/88	05/23/88	/ / /	/ / /	/ / /	Cost & Impact Est. to HFPO For Approval



APPENDIX Q

MEDIA REPORTS

# UNIVERSITY WEEK

15486

UNIVERSITY OF WASHINGTON  
MADIGAN ARMY MEDICAL CENTER  
FORT LEWIS, WASHINGTON  
095000 900

University of Washington  
Vol. 5 No. 30 May 26, 1988

## Madigan 'tops off' new facility; receives top Army rating

In March, workers completed the "topping off" ceremony for the new 414-bed, \$287-million facility that will house Madigan Army Medical Center at Fort Lewis beginning in 1992. The event marked the latest in a series of positive developments affecting Madigan—one of eight teaching hospitals operated by the Army.

In January, Madigan officials announced that their hospital, which has a number of teaching and clinical ties with the UW School of Medicine, is now the Army's top-ranked U.S. medical facility for meeting standards set by the Joint Commission on the Accreditation of Health Care Organizations (JCAHCO). Compared to the Army's 36 other hospitals and medical centers, Madigan received the highest marks from the commission, which renewed the facility's accreditation for the next three years.

Lt. Gen. Quinn H. Becker, the Army Surgeon General, has praised Madigan for doing a better job meeting the JCAHCO standards "than any of our other medical treatment facilities." Col. Leslie M. Burger, the medical center's deputy commander for clinical services, echoed Becker's praise, noting that "it is something we have known all along and it's very gratifying to the staff that the Surgeon General's office recognizes the outstanding performance of our health care providers."

JCAHCO accreditation is essential for a teaching hospital to continue serving as a training site for medical students and residents—a requirement of the Accreditation Council of the American Medical Association.

Madigan also received outstanding results in the Department of Defense (DOD) Civilian Peer Review process. The rate of

"questionable procedures" requiring further review was .012 per 1,000, compared to a DOD average of 3.5.

According to Dr. Benjamin Belknap, associate dean for clinical affairs at the School of Medicine, the UW and Madigan enjoy a "long and fruitful relationship in which the two institutions are always exploring new avenues for affiliation that would be of mutual benefit."

Army resident physicians from Madigan regularly train at the UW in fields such as trauma (at the UW-operated Harborview Medical Center). Also, resident physicians from the UW train at Madigan, particularly in family medicine.

As another example, each year some 57

UW medical students complete required third-year clerkships at Madigan—the busiest hospital in the state—in family medicine, obstetrics and gynecology, and pediatrics. Another 11 students perform two- to four-week electives in medicine, otolaryngology, pathology, surgery, and urology.

Further, a number of clinical faculty from Madigan teach at the School of Medicine, Belknap noted, including Dr. Patrick Duff, Madigan's assistant chief of obstetrics, who has regularly received outstanding teaching awards from the school.

In 1986, the UW Department of Radiology was selected to participate in an Army-funded project to evaluate digital

imaging technology for storing and transmitting high-resolution radiographs and other medical images from one location to another. According to Dr. John Loop, professor of radiology, who is directing the UW phase of the project, Madigan is one of about 15 Army hospitals slated to receive the new technology. In addition, Loop and colleagues from the UW Department of Radiology worked closely with the design team for the new Madigan's radiology facilities.

Madigan provides outpatient clinical care for an average of about 3,000 to 3,500 Army personnel and their families daily, in addition to about 300 inpatients from Army bases in Washington, Oregon, Idaho, Montana and Alaska.



An architect's sketch of the new facility being constructed for Madigan Army Medical Center at Fort Lewis.

# The Olympian

June 12, 1988

Olympia, Washington

## High-tech facility to replace sprawl of old Madigan

By Abby Haleight  
The Olympian

**FORT LEWIS** — The days of orderlies riding tri-cycles along the 7.5 miles of corridors at Madigan Army Medical Center are almost over. A couple blocks away from the sprawling medical center, one of the largest current federal construction projects has reached 54 percent completion. The new Madigan Army Medical Center — 414 beds, a nine-floor nursing tower, two outbuildings, 1.2 million gross square feet — is expected to open in early 1992.

It will offer many of the latest diagnostic and therapeutic devices, with full outpatient treatment. It also is expected to make life a little easier for patients, who now often face long walks from one section of the hospital to another.

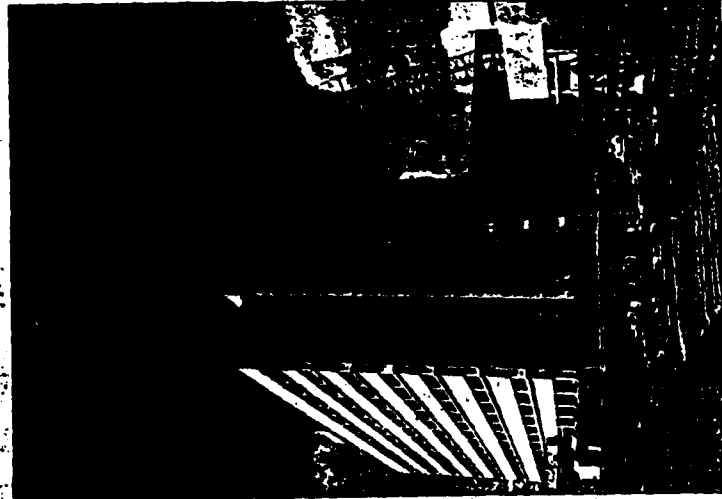
"My first concern is patients," said Maj. Jim Simmons, who represents the Army Surgeon General's office on the project. "You want staff to be more efficient, so they can get more done in a timely manner." Some Madigan staffers lament the loss of "Times Square," the central area in the old hospital that is a communications hub. "Communications aren't vertical," one nurse said.

But the same staffers say they also are looking forward to a time when they don't have to run a half-mile to the emergency room or transport a patient by ambulance from the operating room to recovery.

Although Madigan is one of the busiest hospitals in the state — it is a teaching hospital that serves military personnel, their dependents and retirees from five states — it was age rather than demand that was the deciding factor in rebuilding, Simmons said.

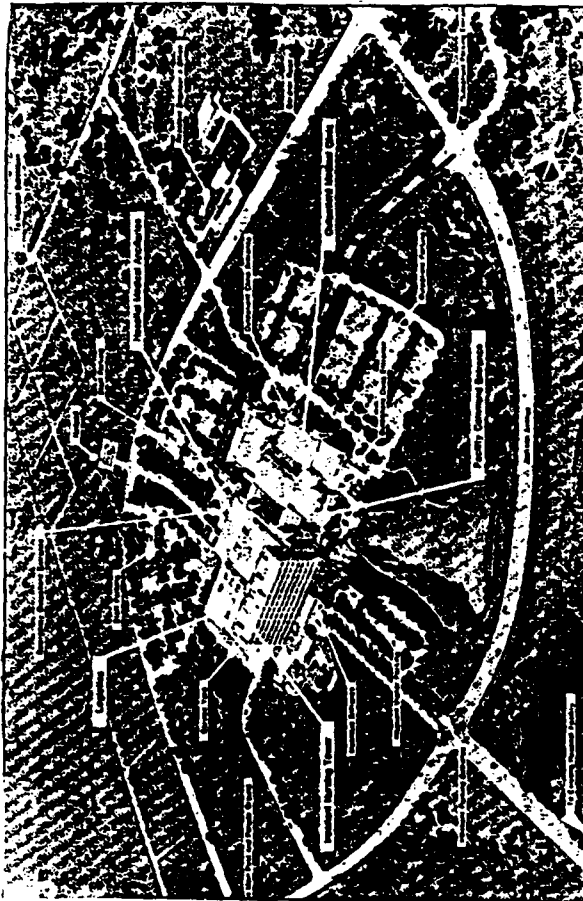
"It's not so much crowded as antiquated," he said. "This is one facility that I can say the Army really did a good job of long-range planning. It's very well-maintained."

See Madigan/back page



Cheryl Heston/The Olympian

The main building takes shape at the new Madigan Army hospital. The current hospital covers 120 acres, compared to the 15-acre site for the new construction. The sprawling style was designed to limit damage from conventional bomb attack.



Artist's conception of the new Madigan Army hospital complex.

## Madigan —

From Page One

"Functionally, it doesn't work well," Simmons added.

Madigan was built during World War II, spread out in low buildings over 120 acres so if it was bombed in a Pearl Harbor-style attack, the entire hospital wouldn't be disrupted. The dynamics of nuclear warfare render that concern irrelevant.

"In this day and age, it's not necessary," Simmons said. By comparison, the four buildings, parking lots and a cooling pond that make up the new hospital campus cover about 15 acres.

Twenty years ago, the Army began a program of upgrading and replacing its medical buildings. Madigan is the last major hospital on the list.

While the masonry building is sturdy, it doesn't have sufficient electrical outlets and its air conditioning system is far outdated. It was only a matter of time before the Joint Commission on the Accreditation of Hospitals would have found faults that could take the hospital out of compliance, Simmons said.

"There have been some Band-Aids put on it to keep it in compliance," he said.

Congress authorized paying \$318 million for the new hospital in 1982. About \$60 million was lopped off after the winning bid for the main project came in at \$207.7 million.

The current working estimate for the project is \$278 million.

So far, the project is on budget — the initial \$207.756 million bid has grown because of change orders to only \$207.817 million over two years, Simmons said. About \$10 million has been set aside for additions or to pay for changes that are not part of the main construction contract.

The U.S. Army Corps of Engineers, which is project manager, has about 14 staffers at the site. The main contractor, Blount Construction Group, has 450 workers and about 70 managers on site. More than 62,900 cubic yards of concrete have been poured for the project.

The new hospital is in four sections. The nine floor tower will house most of the hospital beds. The four-story ancillary building will include operating rooms, labor and delivery, nursery, supplies, radiology and critical care beds.

The 414 beds can be expanded to 622 in wartime.

A three-story outpatient section will include clinics in immunization, dietetics,

dermatology, oncology, family practice, pediatrics and other specialties.

The one-story logistics building will house the energy plant and control center. It will have about 2,000 parking spaces, which Simmons says may not be enough for the hospital.

Instead of orderlies having to carry files and push carts through halls, material and equipment will be moved throughout the hospital in spaces between floors. Smaller packages or messages will be sent through pneumatic tubes. Larger loads will be carried by an automatic box conveyor system or an automatic transport system capable of carrying laundry carts.

The transport systems will be computer operated.

The new hospital will have CT scanners, nuclear medicine, radiation therapy and other high-tech diagnostic and therapy tools.

Madigan, which has had to trim staff and services in recent years because of federal budget cuts, will not add new staffers when the hospital is completed. It also is unlikely to cut any, Simmons said.

The old hospital will remain under the Army Surgeon General's control. Some space probably will be retained for medical use, while other areas will be moth-balled but preserved for future use if needed, Simmons said.

APPENDIX R

FACILITY TRANSITION OCCUPANCY PLAN

included in the contract for relocation. Funds for contracts with specific vendors to relocate equipment items must be programmed by the medical/dental activity.

4.3.4. Facility Transition and Occupancy Plan. The medical/dental activity staff is responsible for initiating the process and organizing the planning committee. The HFPO should assist the committee by providing reports on the construction progress and by establishing target dates for completing the planning process. There are eight general areas that are included in most plans. These areas include provisions for medical services during the move, movement of supplies and equipment, movement of patients, traffic control during the move, security for the old and the new hospitals, provisions for food service on movement day, in-service training for staff members, and public relations with the local military and civilian communities. Each of these areas is discussed individually below.

4.3.4.1. The movement plan should include provisions for emergency medical service to the community during the move. Provisions for this service is especially important on the day the patients, the emergency room, the operating rooms, and the delivery suites are moved to the new hospital. Most hospitals have found it necessary to operate emergency services in both hospitals on the day of the move. This dual operation is expensive in terms of staff and should be discontinued as soon as possible. In order to avoid confusion as to which facility is open, some hospitals have sent written notices to each obstetrical patient, informing her of the exact time that she should begin utilizing the new hospital. Written notification is definitely recommended when the new and old hospitals are located a great distance from each other. The plan must also include provisions for emergency dental care. This may be provided in the old area until the new clinic is operational, in another clinic, or in the hospital dental clinic. The capability and location will be determining factors.

4.3.4.2. Movement of supplies and equipment.

4.3.4.2.1. Timing is an important factor to consider when developing plans for moving the supplies and equipment from the old to the new hospital. Detailed time schedules should be developed for such organizational element to insure that congestion is eliminated at the entrance ways and in the corridors of the hospitals. Any delays caused by poor scheduling could unnecessarily increase the cost of the move. Congestion of equipment in the corridors may also cause unnecessary damage to the floors and walls of the new facility.

4.3.4.2.2. If a civilian firm is to be hired to move the equipment to the new facility, early coordination must be effected with the local purchasing and contracting officer to insure that a contract is obtained with a well-qualified firm. Provisions must also be made for supplying that office with information on the cubage and weight of the material to be moved. Coordination must also be made with the Comptroller to insure that funds are either available or obtainable to fund the civilian moving firm. Detailed plans will be required for the packing of the supplies and equipment.



4.3.4.2.3. If the staff is going to pack the equipment in their area, packing instructions as well as packing materials must be provided. It may be beneficial to conduct a class for the staff on proper packing techniques. Plans must also be developed for inventorying, classifying, and labeling all equipment in the old area. The labels should clearly indicate when equipment is to be turned in to supply, when equipment is to be moved to the new facility, who is to move the equipment, and its priority for move.

4.3.4.2.4. Plans for stocking supplies on the wards and in the clinics must also be developed.

4.3.4.2.5. Special attention should be given to the security requirement for the movement of sensitive or high-theft items as well as for the movement of drugs and other pharmaceuticals.

4.3.4.2.6. All equipment installed or moved to the new hospital should be checked by the medical maintenance personnel to insure that it is in proper working condition when placed in the hospital.

4.3.4.2.7. All central systems, such as oxygen and suction, must be inspected to insure they function properly and that the proper system is connected to the proper outlets. All power outlets should be checked to insure they contain the proper voltage, i.e., 110 or 220 volts. The emergency power system must be inspected and actually tested to insure that it is functioning properly and that all essential areas and equipment are in fact connected to the power supply.

4.3.4.3. Movement of patients.

4.3.4.3.1. The movement plans should also contain provisions for reducing the patient census as much as possible prior to moving day. This reduction can be accomplished by discontinuing elective surgery several days prior to the move and by discharging patients as soon as it is practical and safe to do so following their treatment.

4.3.4.3.2. Outpatients should be discouraged from coming to the hospital for treatment of minor ailments on moving day. Past experience, however, indicates that provisions should be made for holding sick call for the dependent population in one of the post health clinics on moving day. Routine dental treatments should also be curtailed.

4.3.4.3.3. Although a complete rehearsal may not be possible, it is imperative that the disaster plans for the new facility be developed prior to the move. It is never known when these plans must be implemented, and they tend to be ignored or forgotten during the settling-in period at the new hospitals.

4.3.4.3.4. The plans for the movement of patients must provide for the maximum safety and comfort of each patient. These plans should be personally reviewed and approved by the Deputy Commander for Professional Services. The movement plans should include provisions for requiring the

attending physician to designate the type of transportation to be used, the priority for movement, and whether a physician or nurse attendant should accompany the patient in an ambulance.

4.3.4.3.5. The plan should include the specific routes of travel for each ambulance, designation of the entrance and elevators to be used by the patients on each ambulance, and the time of arrival and departure of ambulances at both the new and old facility. In addition, provision must be made for a sufficient number of litter bearers at both locations. The room number and bed number assigned to each patient should be affixed to the patient to insure that he is placed in the proper location in the new hospital. An inventory should be conducted of all patients on the ward prior to and after the move to insure that all patients are properly accounted for. Any special equipment a patient requires should be placed in the new room prior to the patient's arrival. The movement plan should also include provisions for moving the patients' charts and records to the new ward.

4.3.4.4. Traffic Control. Good traffic control is imperative on the day the patients are moved. Assistance should be requested from the Military Police to insure that all routes which the ambulance will use to move patients will be clear of traffic. If intersections cannot be barricaded, a policeman should be positioned there to direct traffic and give priority movement to the ambulance. Provisions should also be made to control spectators who may gather to observe the move.

4.3.4.4. Security. Security for the new facility during the movement period is of prime importance. Many items of sensitive equipment and supplies which are susceptible to theft will be moved. In addition, extraneous personnel may interfere with contractor or engineer personnel who may be working on the facility. It is recommended that a special pass system be developed for this period so that only personnel who have a bonafide reason to be there are permitted in the new facility. Security plans should also be developed for the old facility to insure that all remaining property is properly safeguarded until it can be disposed of through appropriate channels.

4.3.4.6. Food Service. Plans must be developed for feeding the patients and staff during the movement period. These plans must be coordinated with the patient movement plans to insure that all meal times do not conflict with the time patients are moved. Prior experience indicates that patients should be fed a regular breakfast early in the morning prior to the move, a cold lunch at noon, and a regular dinner in the evening at the new hospital.

4.3.4.7. Public Relations. Providing information to the public on the plans for moving to the new hospital is an important part of the movement plans. Information should be provided on when the move will take place, where medical care can be obtained on moving day, and when the patients can have visitors. It is especially important that the public be well-informed about where they can obtain emergency care during the movement period. If possible, a guided tour of the new facility should be made available to the public. These tours should be conducted prior to the time the staff and patients move to the new facility.

4.3.4.8. Training. An in-service training program must be developed to acquaint the staff with the operation of the new equipment and systems installed in the new facility. The staff will also require training in any new administrative or operating procedures that will become effective upon occupancy of the new facility. Guided tours should also be provided to all staff members to acquaint them with the new facility. The HFPO shall consider the use of training films, TV films, manufacturers' demonstrations and similar methods to orientate the staff and other medical personnel to the new facility and equipment. Simulation model to evaluate and develop operational modes may be necessary to acquaint personnel to the new working environment. Training methods and available information from other projects should be evaluated and applied as appropriate. School training requirements must be identified and programmed. Operational concepts designed into the facility should be emphasized.

4.3.4.9. HFPO's Checklist. A general guide is available in Appendix C to assist the HFPO in monitoring the events involved in movement and occupancy of a new facility.

4.3.4.10. Engineer Maintenance of New Facility. Facility Engineer personnel are responsible for the maintenance of the facility. Normal mechanical and electrical operational capabilities of the new facility must be maintained by the facilities engineers. All utility systems must be monitored and determined adequate prior to patient occupancy of the facility. Training, orientation, and simulation methods as discussed for hospital staff members will also be elements of preparation of the Facility Engineers. The HFPO will closely monitor their preparation for occupancy of the new facility.

## APPENDIX C

## PROJECT OFFICER'S CHECKLIST FOR TRANSITION

C-1. Have plans been developed for providing medical care to the post population on the day (days) of the move? Do these plans include provisions for the following services:

- a. Emergency medical care
- b. Sick call for the dependent population
- c. Obstetrical Services

C-2. Have the disaster plans for the new hospital been developed?

C-3. Have the movement plans been coordinated with the other medical facilities in the community?

C-4. Will a civilian moving firm be used to move the supplies and equipment to the new hospital? If so, have the following actions been completed?

- a. Coordination been effected with the purchasing and contracting office to contract for the mover.
- b. Provisions been made for furnishing that office with the weight and cubage of the equipment to be moved.
- c. Coordination been effected with the Comptroller to insure that funds are available to pay for the moving costs.

C-5. Have instructions for packing supplies and equipment been prepared and disseminated to the staff?

- a. Who will do the packing?
- b. When should the packing be completed?
- c. Where will packing materials be made available?

C-6. Has all the old equipment been inventoried, classified, and tagged as to disposition?

a. Which equipment is to be moved to the new facility by the following personnel?

(1) The civilian contractor.

(2) Medical and dental personnel.

b. Which equipment is to be turned into the Logistics Division?

(1) For return to inventory

(2) To be sent to property disposal.

C-7. Have priorities been established for moving the equipment to the new facility?

C-8. If personnel are going to move the equipment, are sufficient trucks and personnel available to complete the task?

C-9. Have supply stockage levels been established for the wards/clinics?

C-10. Have plans been developed for issuing medical supplies, linen, etc., to the wards and clinics?

C-11. Have plans been developed and time allocated for medical maintenance personnel or other appropriate officials to complete the following checks?

a. Test all medical equipment placed in the new facility to insure that it is functioning properly.

b. Verify that the appropriate power supply is provided in each outlet, i.e., 110 or 220 volts.

c. Verify that the central oxygen system is functioning properly and that oxygen is being supplied to all outlets in the facility.

d. Verify that the suction system is functioning properly and is connected to all appropriate outlets.

e. Verify that all essential electrical equipment and lights have been connected to the emergency power supply.

f. Test the emergency power sources to insure that they are functioning properly.

g. Test all other mechanical equipment within the facility to insure that it is functioning properly.

C-12. Have all clinics and administrative areas been scheduled to move in a logical sequence? Does the schedule include information about the following items?

a. Date and time to move.

b. Weight and cubage of equipment to be moved.

c. Entrance ways and elevators to be used in making the move.

C-13. Have provisions been made to insure security of narcotics and other controlled substances during the move?

C-14. Have procedures been established for the turn-in of all drugs, narcotics, and controlled substances on the wards of the old hospital and the issuance of like items to the wards of the new hospital?

C-15. Have plans been developed for reducing the patient census to the maximum extent possible prior to moving day?

C-16. Have plans for the actual movement of patients been developed? Do these plans include the following provisions?

- a. Specific routes of travel for all ambulances.
- b. Specific loading and unloading points for each ambulance.
- c. Designation of the specific elevators the patients on each ambulance will use.
- d. Scheduled departure and arrival times for each ambulance.
- e. Sufficient numbers of litter bearers at both the old and new hospital.
- f. Provisions for the attending physician to ascertain the following items:
  - (1) Establish the priority for movement of each patient.
  - (2) Designate the type of ambulance for transport of the patient.
  - (3) Designate the life-support system that must accompany the patient in the ambulance.
  - (4) Determine whether a physician or nurse must accompany the patient in the ambulance.
- g. Assignment of rooms and beds to each patient prior to commencing the patient move.
- h. Provisions for placing any special equipment in the patient's new room prior to the arrival of the patient.
- i. Provisions for the movement of the patient's personal belongings.

C-17. Is the time for commencing the patient move reasonable?

C-18. Has sufficient time been allocated for the movement of patients?

C-19. Have plans been made for moving the patient's charts and records?

C-20. Has the patient movement plan been approved by the Deputy Commander for Professional Services.

C-21. Have plans been developed for feeding the patients and staff on the day of the patient move?

C-22. Have provisions been made for the Military Police to provide for the control of traffic on the day of the move? Do these provisions include the following elements?

a. Clearing the streets, which the ambulance will use, of all other traffic.

b. Traffic control at all intersections which cannot be barricaded.

c. Control of spectators who may gather to watch the move.

C-23. Have physical security plans been developed for the new facility for the moving-in period?

C-24. Have physical security plans been developed for the old facility for the period of time during the move until all old property has been properly disposed?

C-25. Has publicity material been developed for dissemination to the public informing them of the following action?

a. The date and time of the move.

b. The time the old emergency service will be closed and the new service opened.

c. Where medical and dental sick-call will be conducted for the dependent population on the day of the move.

C-26. Have plans been developed for providing guided tours of the new facility to the public?

C-27. Has the MEDDAC/MEDCEN Commander/Dentac Commander or the Deputy Commander for Administration personally approved the overall movement plan?

C-28. Have provisions been made for telecommunications?

APPENDIX S

HOSPITAL MOVE AFTER-ACTION REPORT



**HOSPITAL MOVE AFTER-ACTION REPORT  
BLANCHFIELD ARMY COMMUNITY HOSPITAL  
MAY 1983**

A medical construction project begun in 1977 culminated on 21 November 1983 with the movement of 61 patients from a 47-building cantonment facility with 7½ miles of corridor, into the state-of-the-art 241-bed Colonel Florence A. Blanchfield Army Community Hospital. A detailed after-action report on the entire project has been compiled by the New Hospital Project Officer, LTC Martin Sargent. The report to follow addresses the actual movement of supplies, equipment, personnel, and patients. It was not within the scope of this report to evaluate the new facility or construction project per se.

The primary basis of this report is input solicited by questionnaire from individual departments/services during the December 1982-January 1983 time period. Analysis of returned questionnaires has been supplemented by additional information obtained through observation and informal conversations. Completed questionnaires attached at Appendix A include much information which is activity specific and may be reviewed in more depth by those needing detailed information in a certain area. The written report will highlight significant problems and areas of common interest.

Overview of Hospital Move -

Construction of the new facility included outfitting the building with a totally new package of office furniture, files and most major equipment. The move plan called for nursing units and clinics to receive pre-positioned medical supply carts stocked by Materiel Distribution System (MDS) which meant that individual activities did not have to move the vast majority of medical supplies. Basically then, the physical move covered a distance of 1.9 miles between the two facilities and involved mostly inpatients, file and desk contents, reference material, and selected pieces of equipment such as emergency carts, defibrillators, infant warmers, typewriters, Xerox machines, etc. Movement from multiple buildings and consolidation or separation of activities were frequent complicating factors which necessitated close coordination. Pest control and preventing the physical move of the roach population to the new facility was a persistent concern. Movement of the facility was accomplished in a week, with the administrative areas and clinics moving on Tuesday - Friday, followed by the inpatient move on Sunday, 21 Nov 82.

Responsibilities -

Hospital Move Coordinator - An individual in the Logistics Division was designated as the Hospital Move Coordinator. This individual coordinated advance logistical planning such as estimating and ordering packing material, writing the movement contract, coordinating between MEDDAC and the move contractor in all phases of the move, and providing instruction to all activities regarding pre-move, move, and post-move requirements. Appendix B includes contractual move instructions (pre-move, move, and post-move) and the final move schedule.

Inpatient Move - Chief, Professional Services has overall responsibility for movement of patients to the new facility. The move day plan at Appendix C was published to provide general guidelines and identify responsible individuals for key tasks. The responsible individuals in turn, developed more specific and

detailed plans for accomplishing the move. Many activities had to maintain split operations in support of ongoing patient care. Appendix D contains the published plan regarding the status of clinical services during move week. In support of the Move Day Plan, Department of Nursing guided the preparation and movement of patients according to the plan shown at Appendix E. Included at Appendix F is the Patient Move Record completed on each patient at the time of the move.

Individual Activities - Each activity designated a point of contact (POC) who worked with the Hospital Move Coordinator and New Hospital Project Group to fulfill movement requirements and to coordinate activity preparations. Activities' responsibilities included identifying and tagging equipment to be moved, ordering packing material, packing non-equipment items, inventorying boxes at old and new locations, unpacking and disposing of used packing materials.

Moving Contractor - Contractor responsibilities included packing/moving designated equipment as well as moving all boxes/packed by activity personnel. Each activity was moved separately in order to minimize loss or misplacement of supplies and equipment. Activity personnel were responsible for maintaining an inventory of items placed on the moving van, which was then sealed prior to leaving for the new facility where items removed from the van were re-inventoried when delivered to the designated location.

#### Strengths Noted by Respondents -

Planning - Advance planning and coordination of the move was cited as a strength by 52% of the respondents. The process of identifying and tagging equipment to be moved was specifically mentioned as a strength by 17% of the respondents. Other aspects of planning which received favorable mention were the assistance available from Logistics, publication of a move schedule for all activities and dissemination of written information on activity operation during move week.

Contract Movers - Use of a contract move as well as the specific contractor used received favorable comments from 21% of respondents. The contractor was cited as efficient and careful by several respondents. Use of contractual services for the move was essential to the hospital's ability to continue its patient care mission. Logistics had neither the manpower nor the vehicles to move the hospital. Reliance on organic resources would have required that activities move themselves which would have been impossible without severe disruptions in patient care services and a greatly extended period of reduced productivity.

Inpatient Move - The inpatient move was superbly accomplished without any untoward effects. The movement of patients was a highly vulnerable period which required intensive coordination among many activities, with key roles being played by Department of Nursing, Patient Administration Division, Pharmacy, and Nutrition Care Service. Clinical Support Division also had essential responsibilities for coordinating clinician input, organic transportation assets, and patient control during loading and off-loading. Special concerns during this period were patient accountability, safe transportation, continuity of treatment plans, timing of patient meals, and safeguarding patient valuables. The use of the ambulance bus for transporting groups of stable patients was identified as critical to the success of the move. The decision to augment organic vehicles was a last minute

one and the very difficult task of obtaining a bus created unnecessary turbulence during the period immediately preceding the move. Logistics coordinated the loan of an ambulance bus from Scott Airforce Base and arranged for the driver, pickup, and return of the bus.

Supplies and Equipment - Commercial contract for receipt, storage, control, and delivery of equipment/furniture was cited as a highly successful way to manage advance equipment purchases. Conversely, approval granted by HSC to laterally transfer, in bulk, excess installation furniture to post was estimated to have saved one year of identifying, classifying, reporting, and disposing of excess.

Operational readiness - Concepts of Operation, transition training and open access to the new facility contributed significantly to personnel readiness. Several respondents noted advantages of putting systems on line in advance (MDS, Nutrition Care Service, Radiology).

#### Problems Identified -

Management of Excess Supplies - Movement of the new facility left behind a completely furnished old facility which contained high volumes of excess medical supplies since pre-stocked carts had been placed in new areas. Significant amounts of overtime were required to manage excess inventories left behind by customers who failed to comply with the requested supply drawdown. Prior planning included a good basic concept for handling excess, but milestones and specific measures were not adequately defined. Action was delayed until a specific plan of attack was developed.

Equipment accountability - Hand receipts and equipment control were problematic from beginning to end. Operational and organizational changes resulted in consolidating or splitting of old hand receipts which were not an adequate means of accounting for new equipment received. All new equipment was picked up by the Property Book Officer hand receipt since HSC disapproved establishing a second property book for the new hospital. Hand receipt integrity was further challenged by activities relocating equipment prior to and during the move. A contributing factor was that keys were issued prior to inventorying hand receipts.

Patient Move - Not all nursing units were ready to move in terms of complete patient preparation, setting up new units, and somewhat limited involvement of evening/night supervisors in orienting to the new facilities and concept of operation. Additionally, movement of patients and equipment were not entirely synchronized; e.g., infant warmers still at old facility after patient move or leaving blood pressure cuffs behind.

Operational readiness - The evaluation of facility and personnel readiness is an essential element for establishing move schedules. Many respondents commented on readiness-related problems. Some activities had not accomplished planning for internal operation until very late which created turbulence and required last-minute adaptations. Some felt that time allotted for operational testing of equipment was too short to allow for correction of deficiencies. Incomplete training was cited by some and noted to be a contributor to system failures or downtime. Incomplete functional planning was noted as problematic in some cases.

For example, Concepts of Operation were judged to be a good approach which suffered from late publication and difficulties in getting all information needed to finalize the concept. Similarly, MDS was inundated and almost obstructed by supply level change requests because many activities waited until the last minute to establish cart inventories.

Changes - The period immediately preceding a move is characterized by high levels of activity, the need for intense coordination, turbulence, and the proclivity for making unilateral decisions to deal with the perceived exigencies of the situation. Respondents noted difficulty in coping with the continuous and last-minute changes in a variety of things ranging from concepts of operation to room designations. Several comments reflected the negative impact of changes in key personnel and the need for contingency plans. BACH experienced changes in at least seven key positions (CO; XO; Chief Nurse; Asst Chief Nurse; C, Logistics; C, Pharmacy; and Project NMA) within less than a year preceding the move.

Manpower - Adequacy of personnel resources to maintain on-going operations, accomplish preparatory actions for the move and simultaneously support new systems was problematic in several instances. Augmentation of personnel assets occurred in some cases; others progressed from operating parts of new systems to providing total support without required resources (e.g., MDS, Pharmacy). An especially critical issue occurred in Logistics where Fire Safety planning for the new facility had to be accomplished as an additional duty. The required emphasis level of expertise and extensive testing/planning required to establish a sound fire prevention and detection plan would have been significantly improved by having a full-time safety officer on board for planning and development prior to the move.

Enforcement of Policy - While advance planning received favorable comments, some respondents noted problems with enforcement of various policies such as supply drawdown, equipment location, or equipment/supplies to be moved.

## RECOMMENDATIONS

Below are some of the more significant and generally applicable recommendations. Additional ones are listed on the questionnaires themselves.

1. **PLAN! PLAN! PLAN!** Have frequent meetings to identify problems and share information. Establish plans well in advance and formulate in specific terms.
2. Designate a point of contact in each activity to be a stable conduit of information specific to the move. These individuals should maintain records of meetings, plans, equipment lists, etc., in order to accommodate the inevitable personnel changes.
3. Use contractual services for the physical move. Commercial contract is also recommended for receipt/storage/delivery of advance equipment purchases.
4. Supplement transportation resources with an ambulance bus for the movement of patients.
5. Publish a move schedule identifying all activities to be moved.
6. Measures to provide maximum hand receipt integrity should include, as a minimum, conducting a hand receipt inventory with each activity prior to issuing keys. Optimally, a second property book should be set up for the new facility.
7. Establish specific plans with target timetables for managing excess equipment and supplies left at the old facility. Direct and enforce a drawdown policy for supply items.
8. Identify mechanisms for monitoring and enforcing compliance with policies, and procedures associated with the move.
9. Stabilize key personnel during the year immediately preceding the move.
10. Test all equipment and systems well in advance. Actively monitor readiness, perhaps with a checklist.
11. Finalize and publish Concepts of Operation at least 60 days prior to the move - they should provide the basis for transition training.
12. Institute measures to reduce last minute policy or procedural changes while assuring necessary coordination for the inevitable changes that must occur.
13. Closely monitor personnel resource acquisition during the year prior to the move to maximize the extent to which personnel assets are on board to support full operation.

**APPENDIX T****SPACE UTILIZATION OF MAMC**

# DISPOSITION FORM

For use of this form, see AR 340-15; the proponent agency is TAGO.

REFERENCE OR OFFICE SYMBOL

SUBJECT

nSHJ-CD

Space Utilization of MAMC upon Occupancy of New Hospital

TO DEH  
Fort Lewis  
ATTN: Mr. Rogers

FROM Chief of Staff  
MAMC

DATE 16 March 1987  
MAJ Raiha/dh/6914

CMT

1. The buildings currently occupied by activities of MAMC will be vacated upon completion of the new hospital. The anticipated move in date for the new hospital is November 1991. Vacated space should be available for occupancy beginning in January 1992. These dates are subject to change based on completion of construction on the new facility.

2. There are several activities assigned to MAMC that do not have designated space in the new facility. These activities have been added since the initial design of the new hospital, or space allocated in the new facility is not adequate based on current and anticipated operations. A listing of the activities is attached as Enclosure 1.


3. There are several areas which will need to be "mothballed" for mobilization purposes. These areas have a medical specific function and cannot be utilized for other than medical purposes. A listing of these areas is at Enclosure 2.

4. At Enclosure 3 is a color coded map of MAMC buildings which designates what space will be available for use by Fort Lewis activities once MAMC relocates to the new hospital. Enclosure 4 provides a list of buildings available for use by Fort Lewis.

5. Buildings designated for use by Fort Lewis activities will remain under the control of The Hospital Support Branch of DEH for maintenance. In the event of mobilization, all buildings will need to be returned to MAMC for use. Therefore, internal structural changes will not be made to the existing facilities. It is recommended that a Memorandum of Understanding be initiated between MAMC and Fort Lewis which outlines responsibilities for buildings allocated to Fort Lewis.

6. Since the actual occupation date is somewhat changeable based on completion of construction and continued changes in medical equipment technology may change space requirements in the new hospital, this document may require updates on a regular basis. As the actual move-in date approaches, more reliable information on space available for reallocation will be forthcoming.

4 Encls

  
T.M. PITTMAN  
Colonel, MS  
Chief of Staff

### Activities with Insufficient Space in New Hospital

- Clinical Specialist School:  
Currently located in temporary buildings at North Fort Lewis.
- Troop Clinic for Special Forces:  
(New Special Forces area does not include a medical treatment facility.)
- Preventive Medicine and Alcohol and Drug Abuse Program:  
Currently located in Building 4290 which anticipates expansion of the MOMS Program and will require the space occupied by Preventive Medicine and Alcohol and Drug Abuse Program.
- Medical Claims JAG:  
New office created by DOD after initial planning for the new hospital.
- Radiology/Inpatient Records Storage:  
Training center requirements include maintenance of inpatient records and x-rays for a period of five years, instead of the normal three years.
- Veterinary Services:  
Currently located at MAMC.
- Clinical Investigation:  
Currently located at MAMC.
- Blood Bank:  
Space allocated in the new hospital will not accommodate more than four persons for blood donation. This precludes doing large blood donations from single units at one time, which is currently being accomplished.
- Dental Activity Headquarters:  
Currently located in a temporary building on main post.
- Automation Management Training and Education:  
New requirement for recurring training on newly acquired automation systems which were not in existence when the new hospital was designed.
- Patient Transport - Medical Evacuation Bus:  
Quarters for Ambulance crews on 24-hour shift, as well as parking for MEDEVAC buses.
- Purchasing and Contracting Branch:  
Currently located at MAMC.
- Clean Linen Storage:  
The linen distribution system for the new hospital does not provide sufficient space to store adequate quantities of clean linen.
- Information Management (Records and Forms Storage):  
Sufficient space is not programmed in the new hospital to store required records, blank forms, and publications.



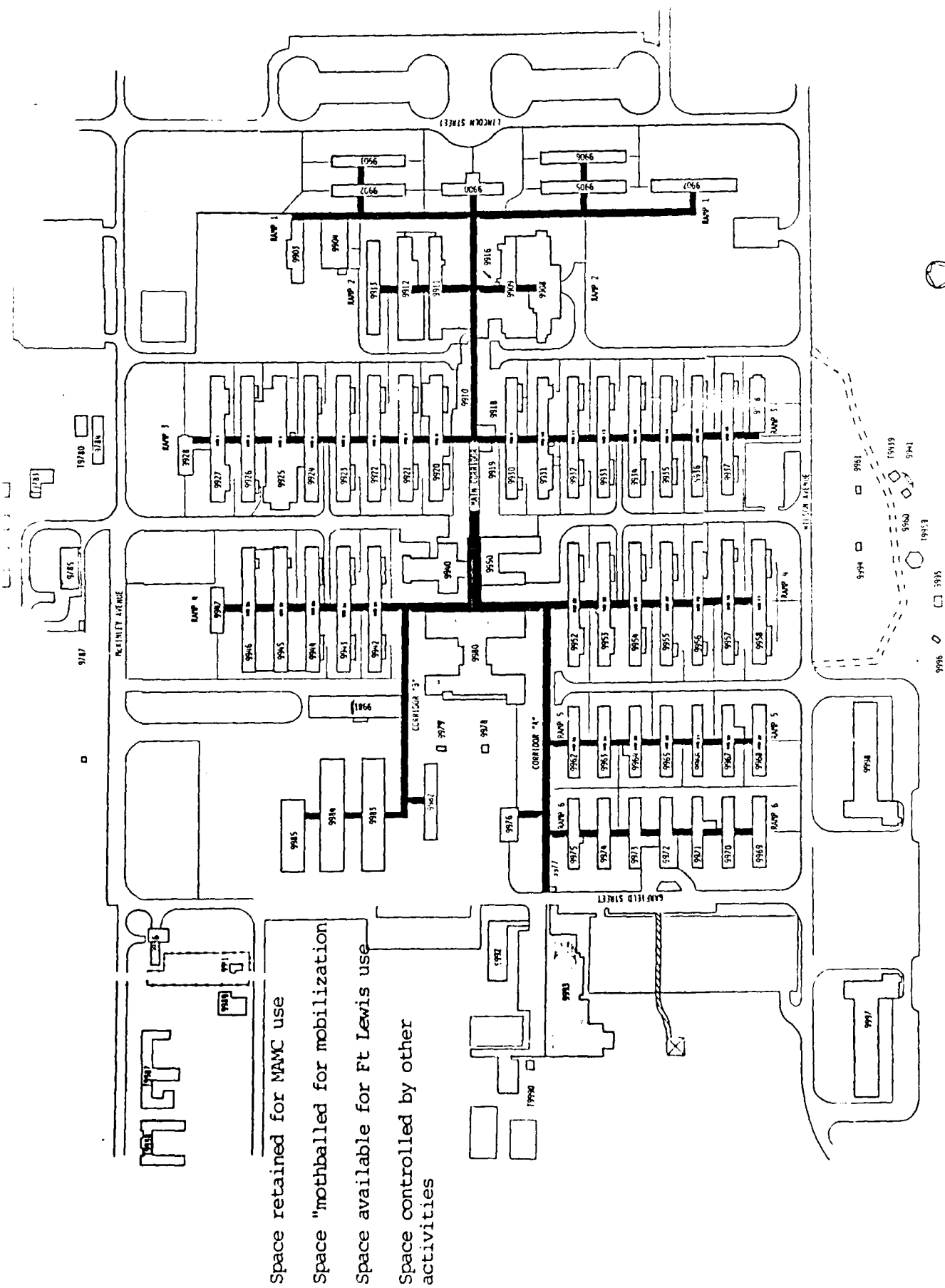
Activities with Insufficient Space in New Hospital (Continued)

--Magnetic Resonance Imaging/Lithotripter/Mammography:  
New technology in Radiology which has no space in the new hospital.

--Regional Headquarters:  
Current initiatives may require the establishment of a regional headquarters separate from the MAMC command element.

AREAS TO BE "MOTHBALLED" FOR MOBILIZATION

<u>BLDG #</u>	<u>ACTIVITY</u>
9912	Hospital Dental Clinic (operations only)
9911	Laboratory
9909	Radiology
9908	Operating Room
9910	Central Materiel Svc Lab Main Pharmacy
9935A	CT Scan
9931	Urology Clinic (x-Ray)
9918	Respiratory Therapy
9920A	Orthopedic Cast Room and X-Ray
9921	Intensive Care Unit
9973	ER Triage Area/Outpatient Pharmacy
9922	Same Day Surgery/Audiology
9972	Emergency Room/Outpatient X-Ray
9925	Labor/Delivery/Nursing
9982	Morgue
9928	Chapel



MADIGAN ARMY MEDICAL CENTER

Space Available  
for  
Occupancy by Fort Lewis Activities  
upon  
Relocation to New Hospital

<u>PLDG #</u>	<u>CURRENT FUNCTION</u>
9940	American Red Cross
9950	PX/Snack Bar/Distribution Center
9947	Well Child Clinic
9946	Pediatric Clinic
9945	Pediatric Admin
9944	Inpatient Records/Med Field Company
9943	Inpatient Pharmacy/Nursing Education
9942	Patient Admin/Materiel Dist System
9952	Occupational Therapy/MS Library
9953	Physical Therapy
9954	Inpatient Ward
9955	Inpatient Ward
9957	Inpatient Ward
9958	Psych Clinic and Ward
9980	Dir Nutrition Care Admin/Dining Fac
9981	Comptroller Admin/Med Transcription

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